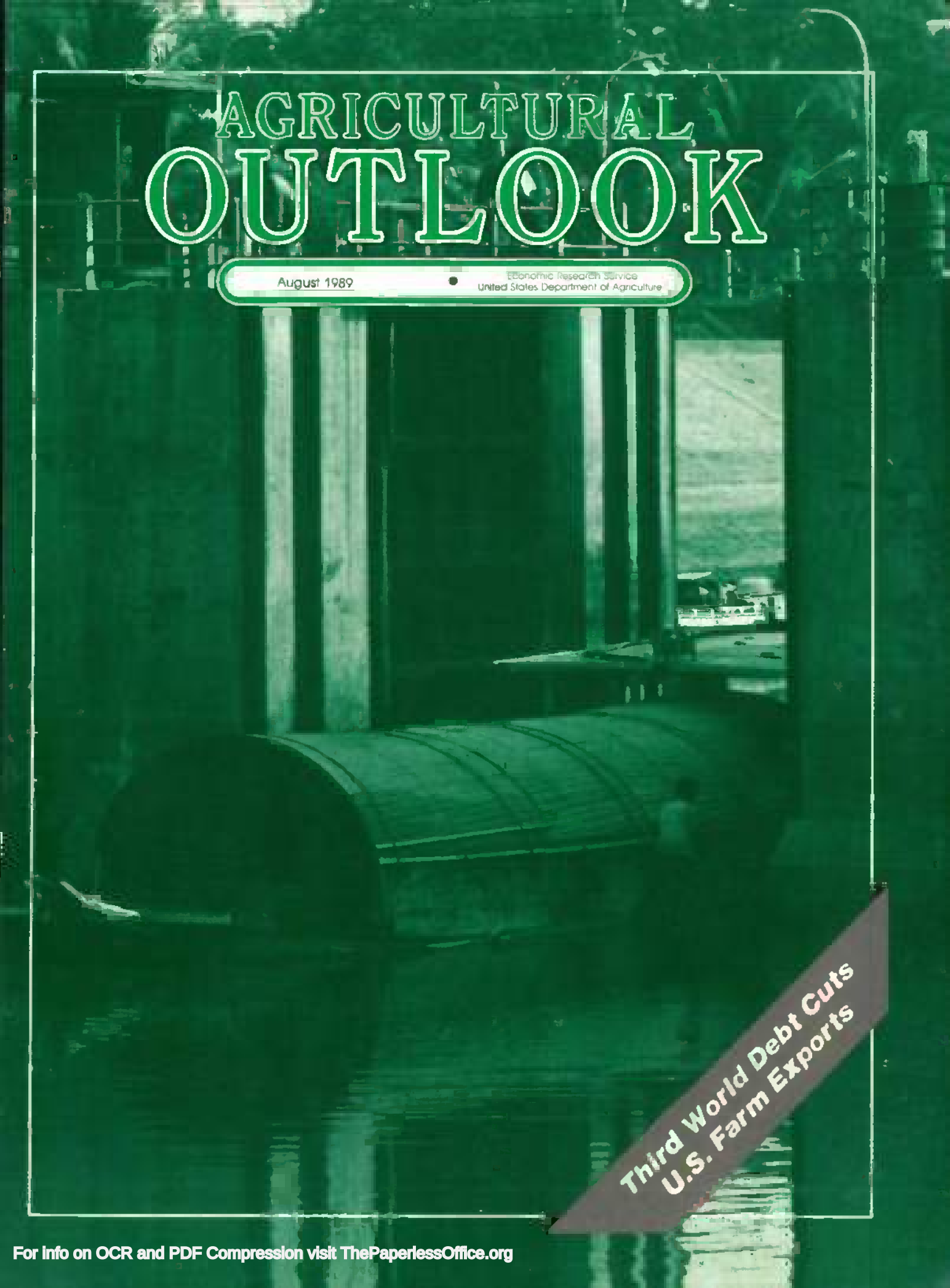
AGRICULTURAL OUTLOOK

August 1989

Economic Research Service
United States Department of Agriculture



Third World Debt Cuts U.S. Farm Exports

AGRICULTURAL OUTLOOK

August 1989/AO-155

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Special Article

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In Brief. . . News of Farm Trade, the CRP, and the World Feed Industry

U.S. agricultural exports for fiscal 1989 (October-September) are forecast to reach $39 billion, the highest in inflation-adjusted terms since 1984. Export volume, however, is expected to decline from a year earlier. Declines in tons of wheat and soybeans exported will likely offset a rise in coarse grain tonnage.

While U.S. agricultural export earnings are up this year, the international debt facing the Third World has cut potential U.S. agricultural exports by about $3 billion a year since 1982. With much of developing countries' savings and export earnings going to make payments on the debt, their investment and growth potential are down. The countries thus have less foreign exchange to pay for U.S. farm products. Developing nations account for over 40 percent of U.S. farm exports.

In China, the recent political turmoil is cutting foreign investment and tourism, international credit, and domestic economic growth. This is leaving China with less foreign exchange to pay for imports. Compounding the problem, austere policies have cut farmers' incentives to sell grain to the government for urban residents, increasing the pressures to import. And longer term farm policies have slowed China's domestic farm production growth. Balancing these competing forces, USDA is forecasting that China's demand for food grains will remain strong.

USDA's Export Enhancement Program (EEP) boosted U.S. wheat exports 10 to 30 percent in 1986/87 (June-May), according to several research studies. While specific estimates vary, the studies also show that 1987/88 wheat export increases due to the program were significantly less than the previous year. Estimates of the EEP's role in boosting wheat exports are subject to some uncertainty since they depend on assumptions about how competitors and importers would have behaved had EEP not been in place. From the program's inception in 1985 through mid-July this year, EEP bonuses valued at $2.6 billion have been used to move $8.4 billion worth of commodities into international markets.

USDA predicts larger world production of most crops in 1989/90, as yields continue their long-term upward trend and weather returns to a more normal pattern. A record-high world rice crop is expected, but consumption will likely be near production, and stocks will remain low. Also, USDA projects a record world soybean crop, as the U.S. and Argentina recover from last year's dry weather.

Total U.S. wheat production this year is projected to recover by almost 17 percent, based entirely on the strength of increased spring wheat prospects. Nonetheless, projected higher domestic prices and larger foreign crops will limit U.S. wheat exports. Larger foreign crops will cut into U.S. corn exports also.

Larger total U.S. meat supplies and potentially lower feed costs point to steady red meat prices and lower broiler prices for the rest of this year and into 1990. Although beef supplies for second-half 1989 are likely to be down, pork supplies may be up from last year. Poultry production has been growing faster than expected.

The eighth CRP signup, in February, brought an additional 2.46 million acres into the 10-year Conservation Reserve. More than 40 percent of the acres added are in the Northern Plains, partly reflecting new rules making fields with cropped wetlands eligible. Total CRP enrollment now stands at 30.59 million acres, compared with the goal of 40-45 million for 1990.

Developing feed industries around the world can spur world agricultural trade. In developing economies, as incomes rise and the demand for meat grows, local entrepreneurs begin producing grain-fed chicken and pork in modern, factory-style units.

Because meat is expensive to transport, local chicken and pork production can be profitable even when the feed must be imported. The technologies behind confinement units and feed manufacturing are readily transferred internationally. And, many marketing opportunities arise for U.S. agribusiness exporters when livestock/feed sectors expand abroad.

Growth in greenhouse and nursery product sales slowed in 1988. While the total value of greenhouse and nursery production continues to climb, imports are rising faster and taking a higher percentage of the domestic market. Domestic output of some greenhouse and nursery products fell in 1988, in part reflecting last summer's drought. Also during the drought, retail demand for outdoor plants wilted.

Agricultural Economy

International Political Events And Agricultural Trade

With nearly one-fifth of U.S. agricultural production sold abroad, U.S. farmers have a big stake in international developments that affect trade. And, of the $39 billion in U.S. agricultural exports forecast for fiscal 1989 (October-September), over 40 percent is destined for the Third World and China.

Farmers hear in the news that political events in the Third World and the centrally planned economies move commodity futures prices. However, it's not so much the political events themselves that are moving markets, but how the events may influence the countries' underlying economic policies.

How will the politically driven policy changes affect the countries' ability to export and import agricultural products? And what will this mean for U.S. farmers?

The policy responses vary with the mix of pressures a particular country must deal with. Pressures on an economy may arise from many sources, including surging populations, inadequate infrastructures, depressed economic growth, hyperinflation, and burdensome international debts. Of these, international debts currently loom especially large in affecting Third World agricultural markets.

International Debt Holds Down U.S. Exports

The Third World's large borrowings occurred mostly in the 1970's, and together with rising raw-materials prices and low real interest rates, the loans fueled substantial economic growth. But, with lower commodity prices and higher interest rates in the early 1980's, paying off the debt began to cut the countries' growth potential.

With savings and export earnings going to make payments on the debt, domestic investment and thus growth are cut. Moreover, the countries have less foreign exchange to buy U.S. agricultural products. The international debt problem is estimated to have cost U.S. farmers $3 billion a year in lost exports since 1982 (see the World Agriculture and Trade article on international debt).

But the ways countries cope with their debt and other problems can affect international commodity markets in other, more complex ways. For example, when governments face large international debt payments, coupled with pressures to fuel economic development, they often spend much more than they collect in taxes. To fund the spending, they may resort to printing money at a rapid clip. This causes rapid inflation—sometimes hyperinflation. Brazil and Argentina are two examples of countries with large debt burdens, compelling domestic pressures, and rapid inflation.

Brazil's Bean Exports Disrupted

Rapid inflation often distorts relative price signals; farmers have trouble telling if today's commodity and input prices will mean a profit at harvest. The heightened uncertainty affects farmers' use of inputs, and can lower planted acreage. In Argentina, prices rose 17 percent in March, nearly 80 percent in May, and over 100 percent in June. In Brazil, prices paid by farmers rose over 1,000 percent last year, and continue rising at a rapid rate.

But for agricultural exporters like Brazil and Argentina, what happens to the government-controlled foreign exchange rates is perhaps more critical. Brazil's novo cruzado was overvalued by 20 to 40 percent earlier this year, but the government was reluctant to devalue because devaluations can fuel inflation in the short term.

With the overvalued currency and dropping world soybean prices, the prices Brazilian bean growers received were too low to cover costs. To protest, the growers stopped selling their soybeans for two weeks in June. Though the government responded with a 12-percent devaluation, half the crop remains to be sold; sales likely will be concentrated in the next few months.

For 1988/89 (October-September), USDA estimates that Brazilian bean production reached a record-high 22 million tons, and that exports have grown by about two-thirds. Nonetheless, USDA projects that 1989/90 production will be down, and exports flat.

Brazilian bean output has grown 45 percent in the 1980's. But, had economic growth not faltered under the heavy international debt burden, much of this extra bean output could have gone to support the then-growing chicken industry (see the special article on the international feed industry). Instead, with people's incomes off, local demand for meat fell, and soybean exports surged. So U.S. farmers face more competition in the world bean market.

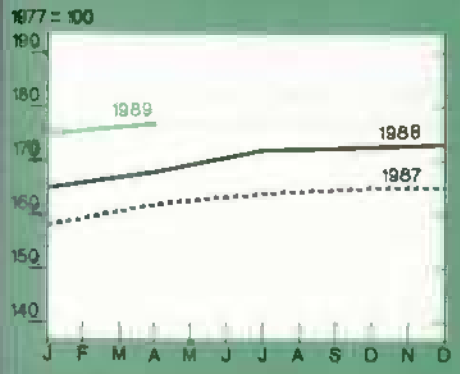
Argentina To Export More Wheat

The Argentine wheat crop is expected to increase this year, reflecting a recovery from a drought last year, higher world prices, and recent policy reforms set in motion by the newly elected president. In July, the austral was devalued by more than 50 percent, and the new government cut interest rates on short-term agricultural loans.

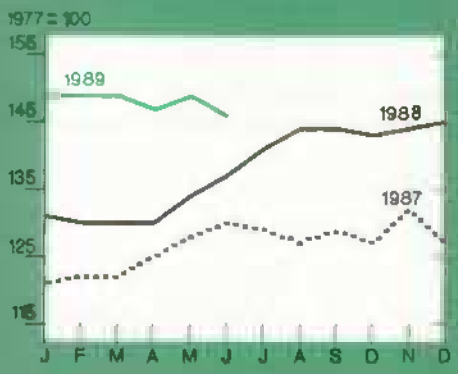
Both moves, combined with recent good weather, increased farmers' incentives to grow wheat for export; plantings are exceeding earlier expectations. In July, USDA upped its projection for Argentine wheat exports in 1989/90 by more than 7 percent. Bottom line: U.S. farmers will feel some extra competition in the world wheat market because of policy decisions made in Buenos Aires (see the Commodity Spotlight on world grain competition).

Prime Indicators of the U.S. Agricultural Economy

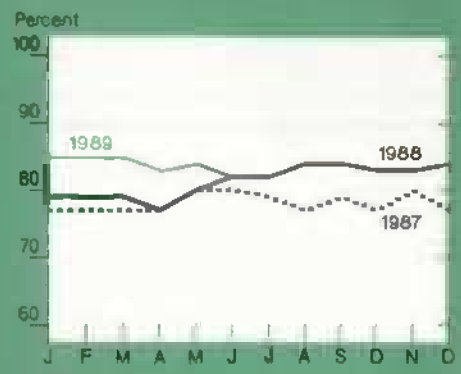
Index of prices paid by farmers[1]



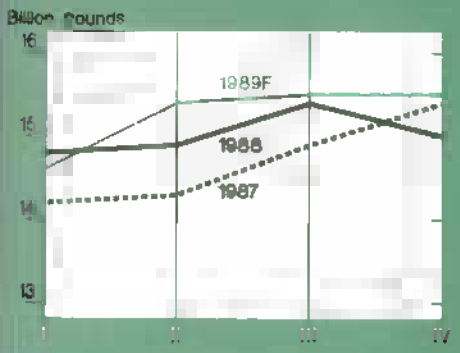
Index of prices received by farmers[2]



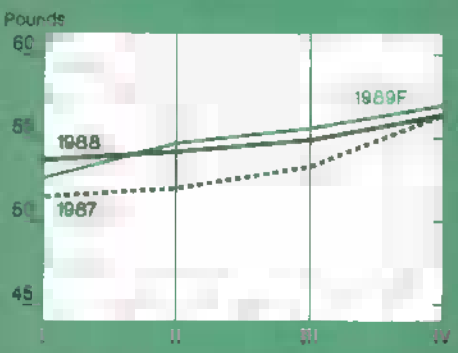
Ratio of prices received to prices paid



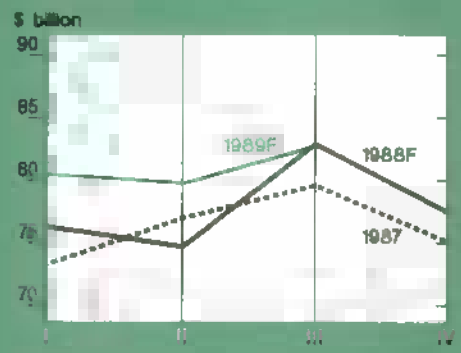
Red meat & poultry[3] production



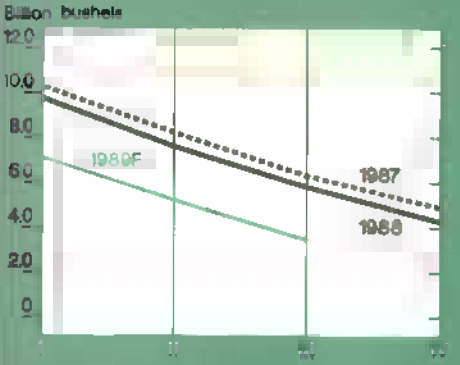
Red meat & poultry consumption, per capita[3,4]



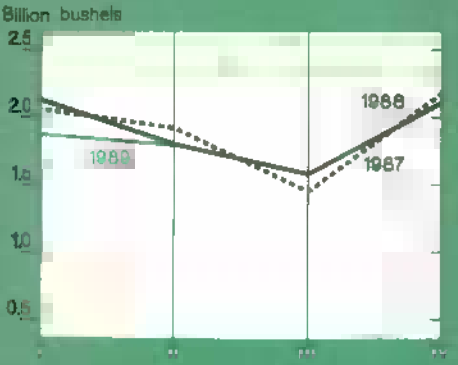
Cash receipts from livestock & products[5]



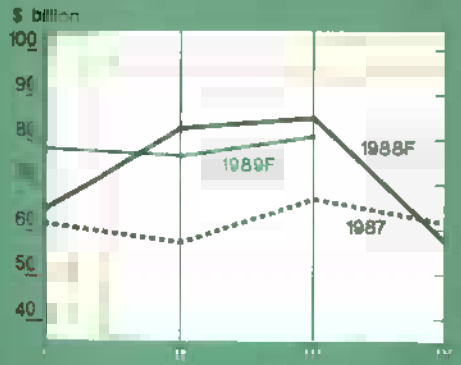
Corn beginning stocks[6]



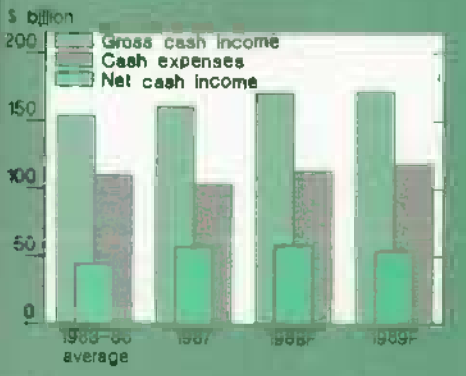
Corn disappearance[6]



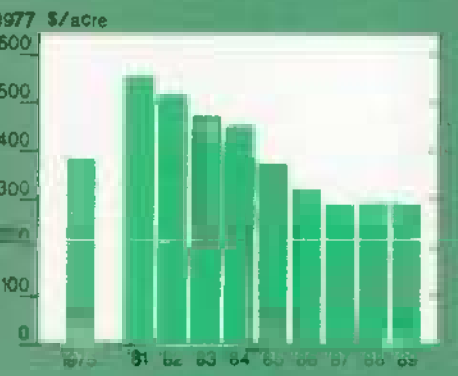
Cash receipts from crops[5]



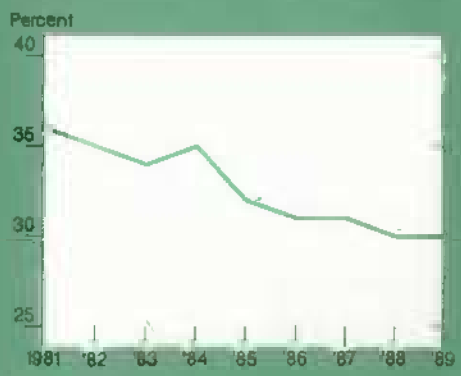
Farm net cash income



Average real value of farm real estate



Farm value/retail food costs



[1]For commodities and services, interest, taxes, and wages. Beginning in 1986, data are only available quarterly. [2]For all farm products. [3]Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. [4]Retail weight. [5]Seasonally adjusted annual rate. I = Dec.–Feb.; II = Mar.–May; III = June–Aug.; IV = Sept.–Nov. F = forecast

Uncertainties in Centrally Planned Economies

Policy changes in the centrally planned economies could have a major impact on world agricultural markets. Governments throughout Eastern Europe and the Soviet Union are trying to boost living standards, and have the goal of increasing meat consumption. Consequently, U.S. farmers' opportunities for grain and meat sales should improve.

In China, however, the recent political turmoil is cutting foreign investment and tourism, international credit, and domestic economic growth. This is leaving China with less foreign exchange to pay for imports. Compounding the problem, austere policies have cut farmers' incentives to sell grain to the government for urban residents, increasing the pressures to import. And longer-term farm policies have slowed China's domestic farm production growth.

Balancing these competing forces, USDA is forecasting that China's import demand for food grains will remain strong. So, among the competing uses for scarce foreign exchange, China likely will be giving the highest priority to paying for agricultural imports.
[Gregory Gajewski (202) 786-3313]

Livestock, Dairy, and Poultry Overview

Larger total meat supplies and potentially lower feed costs point to steady red meat prices and lower broiler prices for the rest of 1989 and into 1990. Although beef supplies for second-half 1989 are likely to be slightly lower, pork supplies may be higher than last year: the June hog inventory report showed total hog numbers only 1 percent below 1988, a smaller-than-expected decline.

Poultry production for 1989 has been growing faster than expected. Milk production for 1989 probably will be above 1988 as well, but egg production will be down and prices up.

Breeding Hogs Down

On June 1, the number of hogs kept for breeding was 3 percent below a year earlier, while market hog inventories were down 1 percent. The declines are modest in view of producers' poor returns in the past 3 quarters. Estimated net returns over cash and replacement costs averaged below breakeven for 10 consecutive months beginning last September. At times, losses exceeded $10 per cwt.

Liquidation of the breeding stock began last summer, when both crops and livestock were stressed by the heat and dryness. Between June and December 1988, the U.S. breeding herd declined by about 500,000 head. However, in the first half of 1989, breeding inventories stabilized, even though returns remained negative. In fact, the 4-percent rise in the 10-State breeding herd between last December and this June was slightly more than the typical seasonal increase. Producers may have been encouraged by improved crop prospects and premiums in deferred futures contracts.

The contraction in hog inventories during the second half of 1988 was probably concentrated among smaller producers who raise their own corn and whose crop fell short of feed requirements. Faced with the prospect of purchasing grain from outside sources, they chose to cut hog production.

Meanwhile, larger specialized operations may have maintained their long-term pattern of steady growth, partially offsetting the liquidation among smaller producers. Thus, the total U.S. breeding herd showed a much smaller annual decline than in post-drought years in the past, when many hog operations were not so large and specialized.

If this year's crop prospects continue favorable, breeding inventories will probably hold steady, exhibiting normal seasonal fluctuations into mid-1990. Returns to hog producers, though substantially improved from the first half of the year, are not likely to encourage further expansion before mid-1990.

But as long as specialized hog operations can continue to expand and keep costs down, hog inventories will probably trend higher over the long term. Retail pork prices averaged about $1.80 per pound in the first half of the year, and are expected to average about the same for the rest of the year.

Despite Lower Placements, Fed Cattle Plentiful in Summer

Placements of cattle in feedlots in the 7 reporting States during May were 75 percent of a year earlier, owing to reduced feeder cattle supplies. Demand for stocker cattle and the ability to hold feeder cattle on pasture increased as pasture and range conditions improved. Feeder supplies were lower partly because of record placements in January-April.

Not all the earlier record placements have been marketed. May marked the first month this year when cattle marketings from feedlots were above last year; marketings were up only 1 percent, though there was an additional slaughter day this May.

Cattle on feed at the beginning of June were 3 percent below last year. From January through April, net feedlot placements were 7.5 percent greater than last year. But lower May placements pulled this year's cumulative placements down 1.5 percent from a year earlier, while marketings declined 1.9 percent.

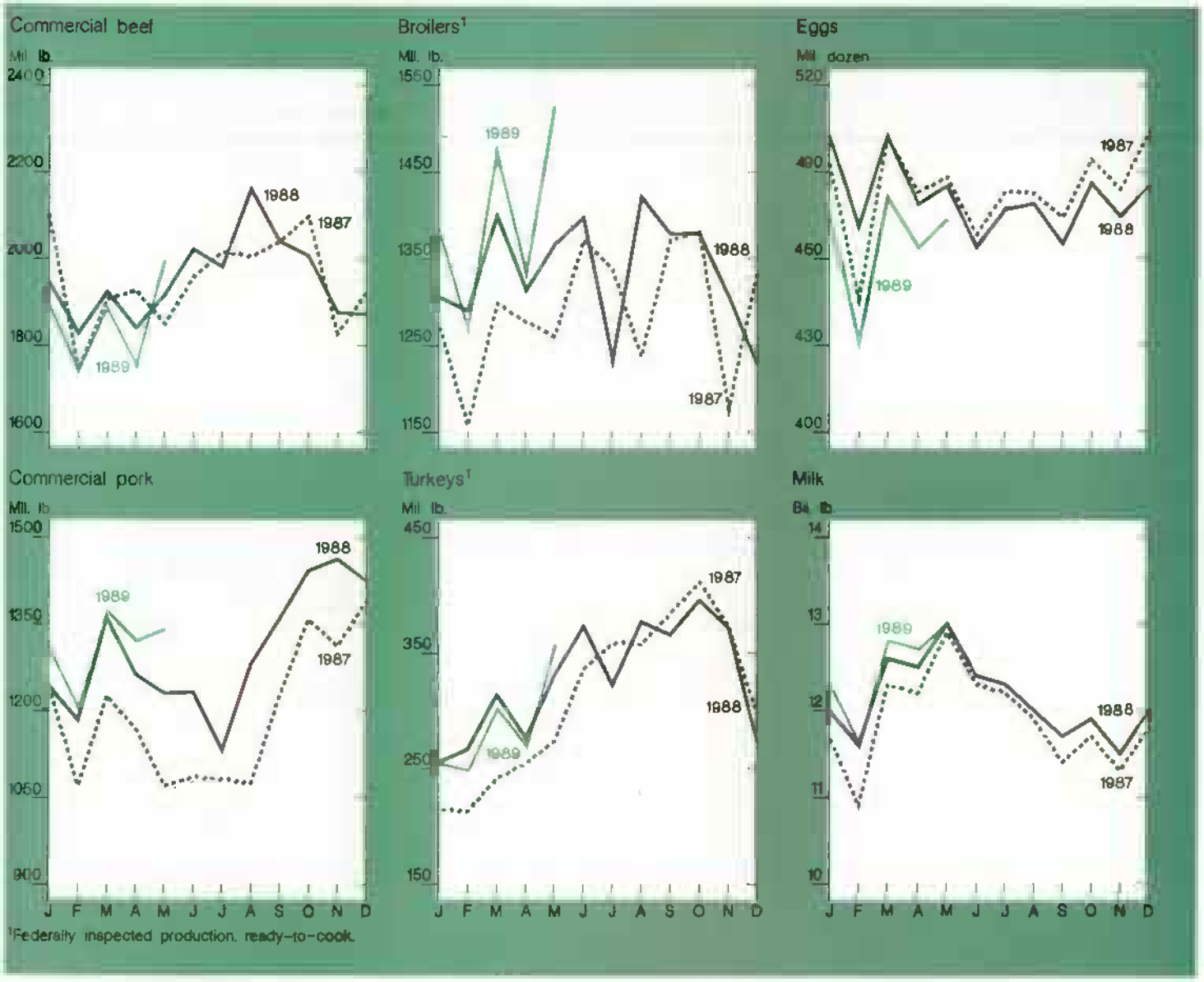
An increase in fed slaughter probably is occurring now, reflecting the earlier surge in placements. Summer beef cow slaughter is expected to decrease more than seasonally because of earlier culling.

Fed slaughter likely will be lower in late summer and fall, as will total beef production. Thus, after the summer increase of fed steers and heifers has been slaughtered, fed cattle prices may climb. Price increases may be delayed, though, unless fed cattle marketings remain current.

Breeding Herd Expansion Possible

U.S. pasture and range conditions improved 3 percentage points during June. Through July 1, conditions remained 6 points below the 1978-87 average; the improvement in May and June supported a strong market for stocker calves and breeding herd replacements. Tight supplies also have been a driving factor. If temperature and precipitation remain favorable, this price strength will continue.

There are indications of a breeding herd expansion. From January through May, total commercial cattle slaughter



declined 3 percent from a year earlier. Heifer slaughter was down 2.3 percent, and beef cow slaughter was basically unchanged. The January 1, 1989, inventory indicated that beef cows were up 2 percent and heifers for beef cow replacement were up 5 percent. It is uncertain what proportion of these beef cow replacements were ultimately used for breeding.

More heifers may be slaughtered in the near future; 6 percent more heifers were on feed on April 1 than a year earlier. Still, evidence of lower cow and heifer slaughter and greater inventories, in addition to positive returns for cow-calf operations since 1985, could signal breeding herd expansion.

Retail Beef Prices Continue To Rise

Retail beef prices rose each month this year through May, as beef supplies averaged near to below a year earlier. In June, Choice retail beef dropped 4 cents to $2.68 per pound. It is expected to decline further through August as fed beef supplies increase.

Estimated wholesale cutout values for Choice 700- to 850-pound carcasses dipped to a low of $114.32 per cwt on June 9, before increasing to fill Independence Day orders. Choice beef cutout values likely declined to $113-$114 during July and early August, after holiday restocking took place.

Returns to Broiler Producers Likely Doubled

Net returns to broiler production likely reached 17 cents per pound for second-quarter 1989, compared with first-quarter returns estimated at almost 9 cents. Excellent returns, together with expectations of reduced second-half feed costs and strong product demand, have stimulated production.

Broiler production for all of 1989 may increase 6 percent. Second-quarter production likely was 7 percent more than a year earlier. Weekly egg sets, chick placements for May and June, and the June 1 hatchery egg flock all indicate third-quarter increases of 7 to 9 percent from last year.

The 12-city wholesale broiler price averaged 67 cents for June, almost 10 percent above last June's 62 cents. May's average was 70 cents per pound, 13 cents higher than a year earlier.

Wholesale prices in the third quarter this year are expected to average 63 to 67 cents per pound, unless extreme summer heat keeps supplies from growing at the expected 7- to 9-percent rate. The average wholesale price for 1989 is expected to be 60-63 cents, compared with 56.3 cents for 1988. Retail broiler prices are likely to drop this fall because of increased supplies.

Wholesale boneless breast prices in the Northeast were erratic during most of the second quarter. May's average price was $2.97 per pound, compared with $2.38 for last year—but daily prices ranged from $2.64 to $3.23. This June, the average price was $2.58 and the range was $2.07 to $2.77.

Fluctuations in other wholesale parts prices have been less severe. Erratic prices for breasts could be a sign of buying patterns by the fast food industry; supplies are lined up for promotional activity, then purchases drop sharply as sufficient quantities are secured.

Turkey Output Begins Rising

Turkey production, while declining through April, was estimated up 3 percent during the second quarter from a year earlier. A further increase is expected in the third and fourth quarters, based on poult placements. Production for all of 1989 probably will be 4 percent over 1988.

Turkey cold storage stocks, at 357 million pounds on May 31, were up 19 percent from the previous month but down 13 percent from last year's highs. The recent gain probably indicates increasing production.

Wholesale prices for Eastern hens averaged a record 71 cents per pound for the second quarter, compared with 51 cents in 1988. However, early in July prices dropped to about 65 cents. Wholesale prices are expected to rise seasonally later in the year, although ample supplies may limit the increase. Prices for all of 1989 may average 68 to 71 cents, up from 61 cents in 1988.

Egg Output Down, And Prices Should Rise

Total egg production in 1989 may fall 2 percent, with consumption expected to drop 3 percent to 237 eggs per person. Second-quarter production likely was 2 percent below a year earlier.

Egg production probably will continue to be profitable for the remainder of the year. Estimated net returns were 8 cents per dozen for the first half. Production responses will be slowed, though, because prolonged losses over the past 2 years forced many producers to leave the industry.

Prices of wholesale grade A large eggs in New York are forecast to average 73 to 76 cents per dozen for 1989, well above the 62 cents of 1988. Second-quarter prices averaged 75 cents, compared with 53 cents last year. Third-quarter prices are expected to be 73 to 77 cents. Accordingly, retail prices are expected to be higher.

Feed Problems Weaken Milk Output

The 1988 drought finally pulled milk production down to year-earlier levels during May-June 1989. Early forage production was particularly important, because last year's drought badly depleted stocks and generated high prices for hay and concentrates. But cool spring weather this year in the Midwest and Northeast compounded the drought's effects by delaying growth of forage crops. High feed costs and limited forage eroded late-spring milk output.

May-June dairy cow slaughter continued high, and cow numbers averaged more than 1 percent below a year earlier. Simultaneously, year-to-year growth in milk per cow weakened to only about 1 percent.

Unless forage yields are poor, milk production probably will resume expanding later this year. Tight markets for nonfat dry milk and cheese will generate strong milk prices during the rest of the year. Favorable crop yields would reduce feed costs and add incentive to expand milk output. If feed costs decline as expected, 1989 milk production probably will total 1 to 3 billion pounds above 1988's 145.5 billion.

Poor forage yields in 1989 would have much larger effects than did the short 1988 crop. Recent weakness in milk production will persist for several months even under good conditions, in contrast to the strong pattern of a year ago. Additionally, normal forage stocks are not there this year to cushion the effects of poor yields.

Although some type of forage will always be available for dairy herds, there might not be enough good forage to support normal milk production and keep costs low. Vulnerability to weather and forage crop conditions creates major uncertainty about second-half growth in milk output.

For further information, contact: Ken Nelson, coordinator; Kevin Bost, hogs; Sue Buhler, Larry Witucki, and Lee Christensen, broilers, turkeys, and eggs; Fred White, cattle; and Jim Miller and Sara Short, dairy. All are at (202) 786-1285.

Field Crops Overview

USDA predicts larger world production of most crops in 1989/90, as yields continue their long-term upward trend and North American weather returns to a more normal pattern. Tight supplies will limit U.S. wheat exports, and larger foreign crops will cut into U.S. corn exports.

As in the past, the USSR and China will be major sources of uncertainty in world commodity markets during 1989/90.

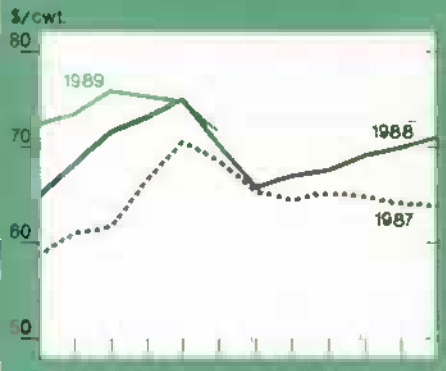
U.S. grain and oilseed crops will rebound, although winter wheat production will be down. Ending stocks for corn likely will be unchanged, while soybean stocks are projected to rise. Prices for corn and soybeans are expected to decline. But wheat prices probably will rise. U.S. cotton stocks are likely to decline significantly.

China Outlook Clouded

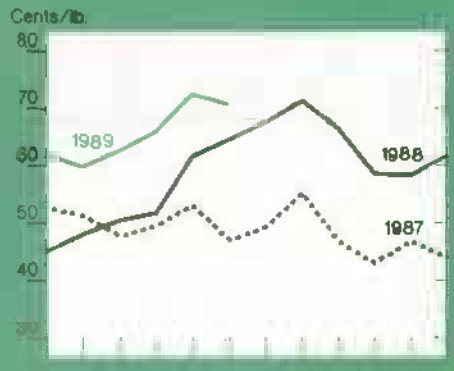
The usual uncertainty about China's trade intentions is compounded by the recent political turmoil. With the country's foreign exchange inflows cut by reduced tourism, less foreign lending, and less foreign investment, China's agricultural imports could fall; attempts to boost exports also are possible. But

Commodity Market Prices

Choice steers, Omaha

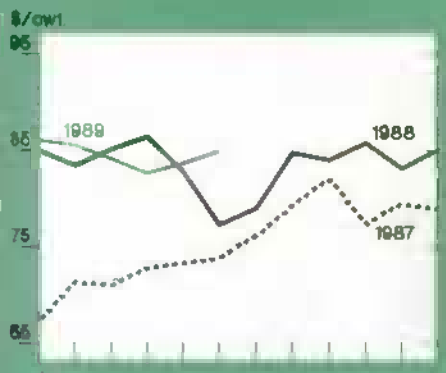


Broilers, 12-city average

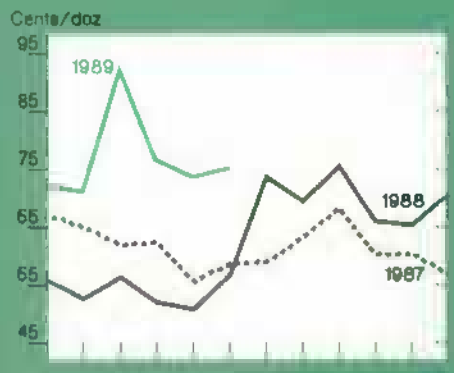


Corn, Chicago[3]

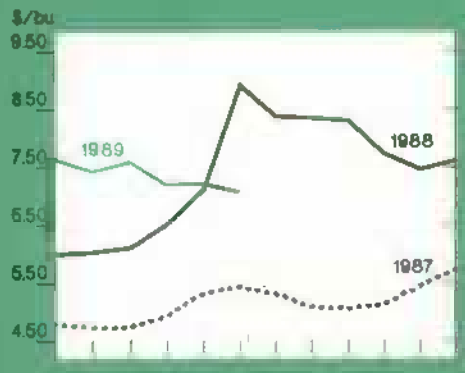
Feeder cattle, Kansas City[1]



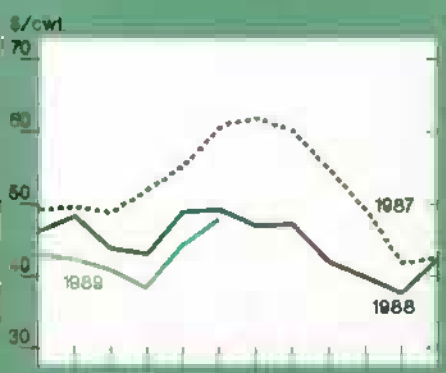
Eggs, New York[2]



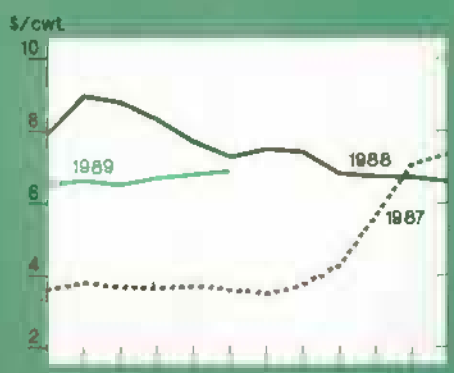
Soybeans, Chicago[4]



Barrows and gilts, 7 markets

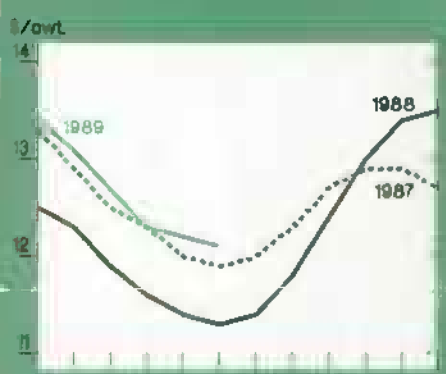


Rice (rough), SW Louisiana

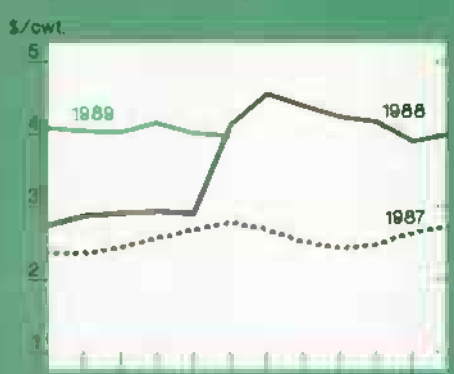


Wheat, Kansas City[5]

All milk



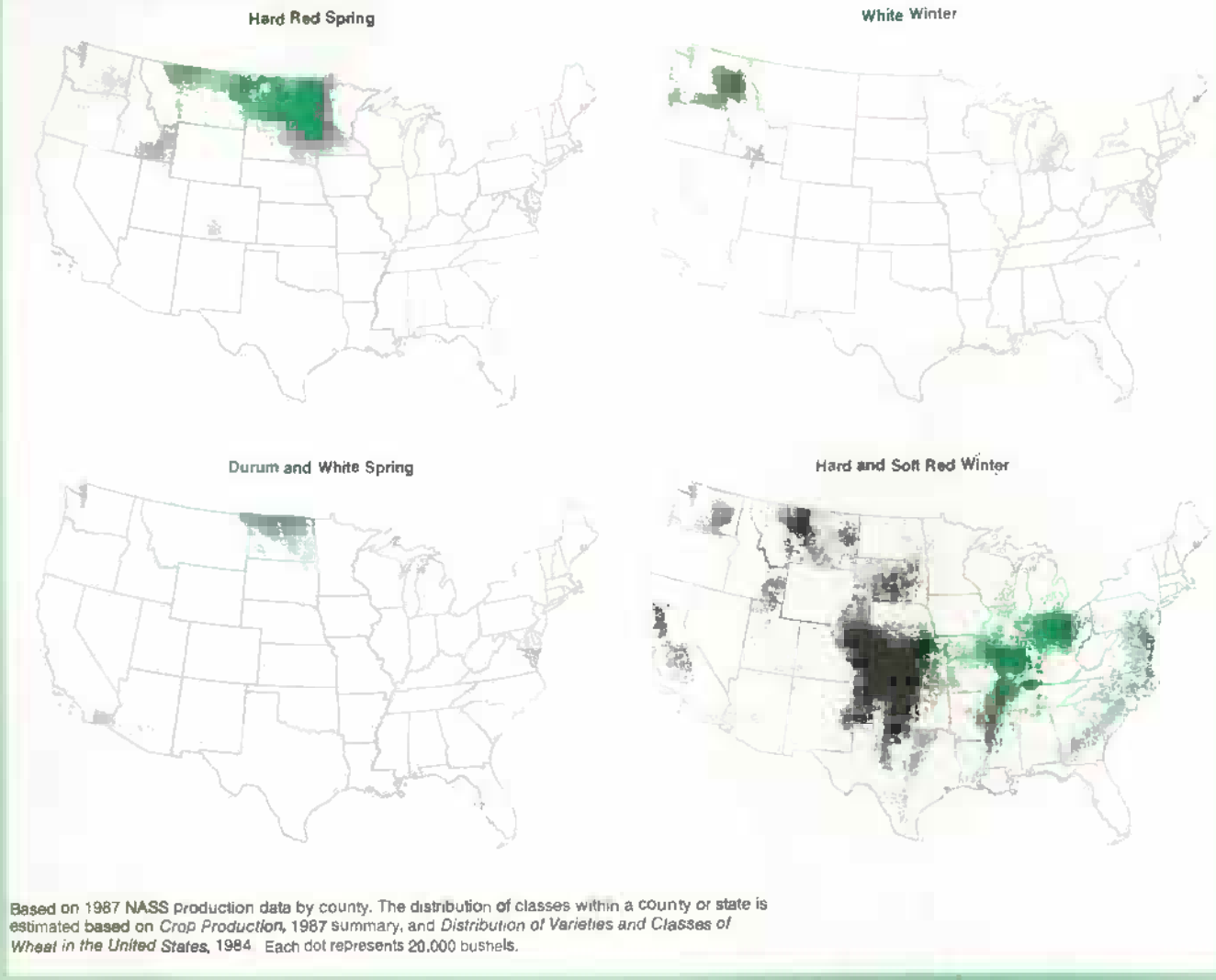
Sorghum, Kansas City



Cotton, average spot market

[1]600–700 lbs., medium no. 2. [2]Grade A large. [4]No. 1 yellow. [3]No. 2 yellow. [5]No 1 HRW

1987 U.S. Wheat Production



Based on 1987 NASS production data by county. The distribution of classes within a county or state is estimated based on *Crop Production*, 1987 summary, and *Distribution of Varieties and Classes of Wheat in the United States*, 1984. Each dot represents 20,000 bushels.

Ins and Outs of Wheat

There are many kinds of wheat, and the different classes have their own production characteristics. Treating all wheat as a single commodity often hides important developments in the supply and demand for individual classes. However, wheat classes are not completely distinct and uniform, with some varieties resulting from crosses between classes. Some wheat classes easily substitute for each other in foods and feed, while others tend to have specific uses.

Winter Varieties Planted in the Fall

The basic division is between winter and spring wheat. Winter wheat is planted in the fall, emerges shortly thereafter, and then becomes dormant or semidormant if temperatures drop below 40 degrees Fahrenheit for a sustained period during the winter. As soon as average temperatures warm sufficiently in the spring, winter wheat begins to grow again.

The winter wheat harvest typically begins in earnest in June. If summers are unfavorably hot, and dryness is a constraint, such as in Kansas, farmers use hard red winter wheat, which matures before the heat of summer. If summers are less harsh, as in Washington, a longer-season winter wheat can be grown, often with higher yields. Some white winter wheats stay in the ground 9 or 10 months.

Severe winter temperatures can kill winter wheat, especially if a protective blanket of snow is not available.

Spring wheat is often grown in areas where winter weather is harsh. Spring wheat is usually planted in the spring, after soil temperatures have warmed enough to encourage seed germination, usually at about 50 degrees.

Spring wheat yields are usually lower than winter wheat. But spring wheat varieties often are higher in protein, making them a premium choice for bread. The specialty wheat best suited to make quality pasta products, durum wheat, is a spring variety.

Hardness and Color Are Also Key

Hard wheats tend to be higher in protein than soft wheats. Gluten, a basic wheat protein, is crucial in capturing the bub-

bles of gas produced by yeast during bread making, allowing the bread to rise.

High protein content is an asset for most breadmaking, but not for many other uses. For cakes, cookies, and crackers, where a crumbly texture is desirable, the lower protein soft wheats are better.

Color can be important to wheat millers. Some varieties are white, but many have a red skin covering the seed. The red wheats may require careful milling and bleaching if a white flour is to be produced. White wheat is preferred in some parts of the world, particularly south Asia, where the locally grown wheat is white and mills are not accustomed to bleaching.

The five wheat classes grown in the U.S. are:

- hard red winter wheat: the largest class, mid-level in protein, suitable for many uses, grown primarily in the Southern Plains, particularly in Kansas and surrounding States;
- hard red spring wheat: typically a high-protein bread wheat, grown mostly in North Dakota and neighboring States;
- soft red winter wheat: often used for cakes, cookies, and crackers, generally grown in States along and east of the Mississippi River, where wheat is often not the most important crop;
- white wheat: both winter and spring types and soft and hard varieties are grown, but most white wheat is soft winter wheat, grown in the Pacific Northwest or in Michigan;
- durum wheat: a hard, spring, specialty wheat used mostly in Italian-type pasta (not in oriental egg noodles), grown predominantly in North Dakota.

In 1987, hard red winter wheat accounted for 48 percent of total U.S. wheat production, hard red spring for 20 percent, soft red winter for 17 percent, white for 10 percent, and durum for 4 percent. *[Ed Allen (202) 786-1840]*

incentives to induce farmers to sell to the government have been hurt. Short supplies for the cities, combined with rapid inflation and urban discontent, suggest that the government may try to maintain imports of key commodities such as wheat.

Weather Hampers Winter Wheat Harvesting

According to USDA's *Grain Stocks* report, U.S. old-crop wheat on hand June 1 amounted to just under 694 million bushels, slightly more than anticipated. Stocks are 45 percent below a year earlier.

After winter and early spring dryness, the 1989 winter wheat crop was hit with rain and other problems that delayed harvest. As of mid-July, only 72 percent of the crop had been harvested. Last year, dry conditions accelerated the harvest, and 83 percent of the crop was in.

Also last year, Kansas harvesting was 70 percent complete by the end of June; this year it was only 20 percent finished. Harvesting in Indiana is particularly slow. The delays have left the crop susceptible to further weather-related damage and raise quality concerns.

The development of this year's spring wheat crop is also behind 1988, but only somewhat behind the 1984-88 average. By mid-July, 93 percent of the crop was headed. Later maturity generally increases the likelihood of heat stress and freeze damage.

June Corn Stocks No Surprise; Excess Moisture Hinders Plantings

June 1 corn stocks amounted to 3.4 billion bushels, compared with 5.8 billion a year earlier, yet they are sufficient to meet both domestic and international needs.

Corn plantings in parts of the Eastern Corn Belt were late. Excess soil moisture and even flood conditions, primarily in Ohio, likely have modestly reduced plantings from farmers' earlier intentions.

For corn, July is the critical month. As the crop enters the silking/tasseling stage and continues to progress, its demand for moisture is intense. By the end of June, the crop had begun to enter the silking stage, on schedule. Growth during the first two weeks in July was slow, and well behind previous years' pace.

Dry soils in Nebraska and Iowa, coupled with above-average temperatures, stressed the corn crop. However, recent above-average rains and cooler temperatures have improved prospects.

In the Eastern Corn Belt, soils continue to be too wet. Nevertheless, only 39 percent of this year's U.S. crop is rated fair, poor, or very poor. Last year's crop as of mid-July was already reeling from drought, with 82 percent rated fair or worse. This year's harvest is expected to be far larger and of higher quality.

Sorghum Plantings Timely

By the end of June, over 90 percent of the sorghum crop was in the ground, only slightly below last year's pace. Although it is still early, most of the crop appears to be in far better condition than last year. Fifty-four percent of the crop is rated good or excellent, compared with only 39 percent in 1988.

World Rice Production Gains

A record world rice crop is forecast for 1989/90. Near-record crops are likely in China and India, which normally account for 57 percent of world production. Larger crops are also expected in Indonesia, Thailand, and the Philippines. But world consumption will nearly equal production, and stocks will be very low. The stocks-to-use ratio likely will be the lowest since 1974/75, and prices on world markets will remain firm.

Despite the record crop and relatively high prices, the first forecasts of calendar 1990 world trade indicate only a modest drop, largely because of expected lower imports by China, India, and Indonesia. The latter two are importing this year to rebuild stocks.

China is providing the major surprise in the market, as its exports are down sharply, imports are at their highest since the 1970's, and the country is becoming a net importer for the first time in modern history. With a larger crop this year, China's imports may drop in 1990, while exports recover. As with wheat, the government's ability to procure rice from the countryside will have an important bearing on the level of trade.

World and U.S. Production and Utilization

	1987/88	1988/89	1989/90
	Million metric tons		
WORLD			
Wheat			
Production	502	500	533
Use	532	530	538
Exports	106	99	99
Ending stocks	146	116	112
Corn			
Production	447	398	466
Use	462	460	467
Exports	57	67	66
Ending stocks	146	84	82
Soybeans			
Production	103	93	109
Use	102	99	106
Exports	30	24	26
Ending stocks	20	15	18
UNITED STATES			
Wheat			
Production	57	49	58
Use	30	26	28
Exports	43	39	33
Ending stocks	34	19	16
Corn			
Production	180	125	189
Use	152	133	140
Exports	44	53	50
Ending stocks	108	46	47
Soybeans			
Production	52	42	53
Use	34	32	33
Exports	22	15	16
Ending stocks	8	3	7

Note: Exports of wheat and corn do not include intra-EC trade shipments.

Demand for rice is forecast to continue strong in major U.S. markets: the EC, Iraq, Saudi Arabia, and countries in Latin America and Sub-Saharan Africa. However, a drop in the 1989/90 U.S. crop is likely to reduce calendar 1990 exports.

Global Soybean Output To Set Record

USDA forecasts point to record-high world oilseed production in 1989/90, with soybean output in the U.S. and Argentina recovering from last year's drought and gains projected for peanuts, sunflowerseed, and flaxseed. Moreover, a record world soybean crop is expected. While Brazil's yields are likely to drop from this year's near-record, recovering yields in Argentina and larger harvested area are expected to mean a 10-percent increase in the Southern Hemisphere crop.

Season-average soybean prices for 1989/90 will be well below 1988/89. Brazilian crush has been slow since the harvest because farmers, unhappy with prices received and government policy, have been slow to market their crops. So, world bean stocks will be ample at the beginning of the U.S. marketing year in September.

The stocks, together with the large Southern Hemisphere crop likely next spring, will limit recovery in U.S. bean exports. A small U.S. export gain, coupled with the 27-percent increase in output, will mean a substantial increase in U.S. ending stocks from this year's very low level.

World soybean crush and meal use are down in 1988/89 because of the smaller world crop and high prices. Use will recover in 1989/90, particularly in the EC, where domestic rapeseed and sunflowerseed crops will be lower.

World soybean trade is down by more than 20 percent in 1988/89, but it should partially recover in 1989/90. Larger soybean supplies, lower prices, and better margins for European crushers are expected to account for the gain.

World trade in soybean meal is up slightly this year. A return to more normal crush margins may mean that soybean trade expands more than soymeal trade in 1989/90. With larger supplies, U.S. bean exports are forecast to increase 9 percent in 1989/90, as foreign meal users crush their own. U.S. meal exports are not expected to change.

USSR soybean meal imports are now second only to those of the EC. Growth in Soviet imports, from 0.5 million tons in 1985/86 to a forecast 4.2 million in 1989/90, is the major reason for world trade increases; EC imports are trending down.

U.S. Cotton Exports Rise

World cotton production in 1989/90 is forecast down 4 percent from a large 1988/89 crop. The smaller U.S. crop accounts for all of the decline. U.S. production prospects are less favorable because of excessive soil moisture in parts of Texas, the Mississippi Delta, and the Southeast. Planted area is estimated at 10.5 million acres, down 16 percent from last season.

Rising world consumption and low stocks are expected to restrict sales by U.S. competitors, opening the way for a sharp rise in U.S. exports. U.S. shipments in 1989/90 could total 7.8 million bales, the biggest since 1979/80. Large U.S. mill use also will contribute to sharply lower U.S. ending stocks, forecast at only 4.5 million bales.

Poor early-season weather is cutting Soviet production and potential exports. Weak producer incentives have meant below-plan output in China for the last several years. As China's once-large stocks dwindled during 1988/89, exports dropped and imports jumped. In 1988/89, China is expected to be a net cotton importer for the first time since 1982. In 1989, state-set cotton prices are up relative to oilseeds and some grains, but plantings are down and yield prospects uncertain.

USDA is estimating that China will produce a bigger crop than last year, but that imports will continue to be large while exports drop again. However, the forecast contains a large margin for error. *[James Cole (202) 786-1840 and Frederic Surls (202) 786-1824]*

For further information, contact: Sara Schwartz, world food grains; Edward Allen, domestic wheat; Janet Livezey, domestic rice; Pete Riley, world feed grains; James Cole, domestic feed grains; Bob Cummings, world oilseeds; Roger Hoskin, domestic oilseeds; Carolyn Whitton, world cotton; Bob Skinner, domestic cotton; Jim Schaub, domestic peanuts. World information (202) 786-1824; domestic (202) 786-1840.

Upcoming Economic Reports

Summary Released **Title**

August

1 Fruit Yearbook
7 World Food Needs & Availabilities
8 Agricultural Resources
9 Developing Economies
10 World Ag. Supply & Demand
17 Livestock & Poultry
18 Agricultural Outlook
22 Feed
23 Vegetables & Specialties
24 Wheat
25 Exports
Livestock & Poultry Update
Foreign Ag. Trade Update
29 Agricultural Income & Finance
30 Dairy Yearbook
31 Cotton & Wool Yearbook

Upcoming Releases from the Agricultural Statistics Board

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued by the time the September **Agricultural Outlook** comes off press.

August

1 Egg Products
2 Farm Prod. Expenditures, 1988-Final
4 Poultry Slaughter
Dairy Products
7 Celery
10 Crop Production
11 Vegetables
Turkey Hatchery
14 Farm Labor
15 Milk Production
17 Cattle on Feed
18 Sugar Market Statistics
Mushrooms
21 Catfish
23 Cold Storage
Cranberries
24 Eggs, Chickens and Turkeys
25 Filbert Production
(Tent.)
Livestock Slaughter
29 Peanut Stocks and Processing
31 Rice Stocks
Agricultural Prices

Specialty Crops Overview

Higher 1989 contracted acreage of the four major processing vegetables likely will result in lower prices for canned and frozen items later this summer. Larger apple production will keep downward pressure on prices in 1989/90.

U.S. farm-raised catfish output has resumed its rapid growth, but overcapacity is putting downward price pressures on processors. Tobacco stocks continue down despite reduced consumption; exports are rising.

Vegetable Processors Boost Acreage

Vegetable processors are trying to replenish stocks of snap beans, peas, and sweet corn, and to keep up with growing demand for tomato products. So they have contracted for 14 percent more acreage than in 1988. Widespread drought in the Central States cut 1988 output and caused wholesale prices to soar.

Frozen vegetable stocks at the beginning of June stood 22 percent below a year earlier. Higher production this year should lower prices for canned and frozen vegetables later this summer.

Processors reported 1.41 million contracted acres for the four major vegetables. Snap bean area is up 22 percent, sweet corn up 8 percent, green peas up 15, and tomatoes up 17. More than 97 percent of total processing acreage of the four major vegetables last year was under contract.

Potato Acreage Up Slightly, Prices To Remain Firm

The July crop estimate indicates that potato growers planted 1.28 million acres this year, 1 percent more than last year. The area for the fall harvest is estimated at 1.09 million acres, fractionally higher than in 1988. If this year's yields are near recent averages, total production will be 365 to 375 million cwt. The average grower price for 1989 could be $4.75 to $5.25 per cwt.

Smaller-than-usual stocks of table potatoes and strong processor demand for storage potatoes resulted in higher prices this spring. Prices likely will continue strong until the fall-crop harvest begins in September.

Estimated area planted with sweet potatoes, 93,600 acres, is up fractionally from last year. Growers' prices likely will remain firm for the 1989 crop.

The July estimate of dry edible bean area for harvest stands at 1.7 million acres, up 25 percent from last year and 1 percent above 1987. The area rose 35 percent in Michigan and 32 percent in North Dakota. Michigan is the major producer of navy beans. North Dakota is a major navy and pinto bean producer.

If dry bean yields are near the average for recent years, production would approach 25 million cwt, compared with 19.2 million in 1988. Such an increase would cause prices to plummet from the $29.70 per cwt estimated for 1988. Prices averaged $16.50 for the 25.9-million-cwt crop in 1987.

Big Apple Output May Pressure Prices

Apple production is forecast at 9.7 billion pounds this season, up 6 percent from last year. The larger crop will keep downward pressure on grower prices, which tumbled this spring following heightened consumer concerns about the chemical Alar.

USDA recently announced plans to spend up to $15 million to divert 1988-crop apples from traditional market channels to help clear stocks from storage before the beginning of the 1989 season. The action was taken to offset the effects of oversupply and low prices on the apple industry.

The California all-grape crop forecast stands at 5.2 million tons, 5 percent below last season. Raisin-type grape production is forecast at 2.45 million tons, 5 percent lower than last year, but 13 percent more than 1987. Strong demand for raisins, combined with smaller grape production, will keep raisin prices strong.

The first forecast for table-type grapes in California is 700,000 tons, 7 percent below last year and 30 percent more than in 1987. California's wine grape production is forecast at 2.05 million tons, 6 percent lower than last year.

Tart cherry production is forecast at 264 million pounds, up 12 percent from the drought-reduced 1988 crop, but 26 percent below 1987. Production in Michigan, the number-one cherry State, is projected up 6 percent. Last summer's drought killed some trees in Michigan and weakened others, while cold weather and freezes this spring reduced the cherry set. In New York, the second major producer with 9 percent of last year's production, output is forecast up 41 percent.

Catfish Production Resumes Rapid Growth

After rising only 5 percent in 1988, farm-raised catfish production appears to be returning to the higher growth rates of 1980-87. Catfish processing grew at an average annual rate of 29 percent between 1980 and 1987. Processing during the first 5 months of 1989 rose almost 15 percent from a year earlier. Growers have expanded acreage in ponds and are increasing the number of fish stocked per acre.

Despite higher production, farm prices have remained firm. Growers received 76 cents per pound in May, a penny higher than a year earlier. Wholesale prices, however, are running lower than a year ago. Processors received $2.31 per pound for frozen catfish in May, compared with $2.37 a year earlier. Excess capacity has caused processors to bid up grower prices while cutting wholesale prices.

Possible mandatory Federal inspection is a key issue for both aquaculture and the conventional fishing industry. Several bills are pending in Congress. The main questions are: Should inspection be funded by user fees or by the Government? Should inspection cover all fish or only processed fish? Should it be limited to visual examination or also include chemical analysis for pollutants? Should inspections be conducted by the Department of Agriculture or Commerce, or by the Food and Drug Administration?

Tobacco Use Continues To Decline

Disappearance of U.S. tobacco likely dropped about 3 percent in 1988/89 because of decreased domestic use. Exports may have risen slightly from the year before. But, use probably has exceeded marketings, and stocks carried over to the 1989/90 marketing year (beginning July 1 for flue-cured and October 1 for burley and other kinds) may have declined 10 percent from 1988/89's 2.83 billion pounds.

Per capita consumption of cigarette tobacco in the U.S. has been falling almost continuously since the early 1960's. Lower U.S. cigarette consumption and the use of less tobacco per cigarette are reducing domestic leaf disappearance.

For the year ending June 30, people in the U.S. likely will have smoked 3 percent fewer cigarettes than a year earlier, the biggest decline in 5 years. Higher prices, health concerns, and greater restrictions on smoking are the major factors. Cigarette exports are rising, but not by enough to offset slipping domestic sales.

The July *Crop Production* report points to a 7-percent increase in flue-cured production to 871 million pounds, and a 13-percent rise in burley acreage for 1989/90. If average growing conditions prevail, burley output could reach 560 million pounds. Production is up because USDA's marketing quota has expanded now that stocks are lower.

Despite higher production, the total supply likely will fall short of 1988/89 because of smaller beginning stocks.

Growers' marketings are regulated by their effective quotas. The effective quota is the basic quota adjusted upward for undermarketings or downward for overmarketings the previous season. Growers may market up to 103 percent of their effective quota in a particular year. Effective quotas for 1989 are 900 million pounds for flue-cured tobacco and 671 million for burley. *[Glenn Zepp (202) 786-1883]*

For further information, contact: Ben Huang, fruit; Shannon Hamm, vegetables; Peter Buzzanell, sweeteners; Verner Grise, tobacco; Doyle Johnson, greenhouse/nursery; David Harvey, aquaculture. All are at (202) 786-1883.

Commodity Spotlights

Competitors To Advance In Tight Wheat Market

USDA projects that world grain production in 1989/90 will rebound 8 percent from a year earlier, after 2 years of declines. However, world grain supplies are expected to remain tight, with early projections of use slightly exceeding production. Ending stocks are likely to decline again, and are expected to be about 17 percent of use, the lowest since 1974/75.

However, the total picture obscures divergent markets for individual grains: for wheat, supplies are already tight, while coarse grains are more abundant. The additional squeeze projected for both wheat and coarse grains will be more critical for wheat.

The spread between world wheat and corn prices in the last few months is the widest since 1982. The gap will probably continue to grow during 1989/90. Corn and other coarse grain prices are projected to fall, while wheat prices should remain firm.

Wheat exporters that compete with the U.S., reacting to these signals, are expected to increase 1989/90 harvested area, production, and exports sharply. Harvested area and production are projected to be the highest since 1986. In contrast, competitors' coarse grain output and exports are projected to increase more modestly, and their changes may affect U.S. trade less.

Low Wheat Stocks Contribute to Uncertainty

Low world wheat stocks provide little cushion against an unexpected production shortfall in a major trading country. With the stocks-to-use ratio currently projected to be the lowest in 30 years, such a shortfall could lead to even higher prices. In recent months, several buyers have adjusted to higher prices by substituting coarse grains for feed wheat imports. This substitution is expected to continue into 1989/90.

For coarse grains, the stock cushion is relatively deeper, and imports account for a lower share of global use than for wheat. So, coarse grain markets will be less vulnerable to unforeseen developments. High prices for feed-quality wheat will continue to support a relatively high volume of coarse grain trade. Although well below the highs of the mid-1980's, the stocks-to-use ratio for coarse grains is projected to be in line with historical averages.

Global wheat trade in 1989/90 is forecast to be about the same as in 1988/89. For many countries, the political necessity of importing food grains will continue to outweigh the consequences of draining foreign exchange reserves, increasing debt loads, or reducing imports of other commodities.

However, global import demand is expected to be tempered by large crops in the major importing countries. China, India, and Pakistan are all forecast to harvest record wheat crops in 1989/90.

China is projected to continue as the world's largest importer, but the outlook is clouded by the recent political turmoil. The Soviet Union's 1989/90 production is forecast up 8 percent, and the Soviets are again expected to import more feed grains than wheat.

Among other importers, the outlook is mixed. In North Africa, wheat demand continues to outstrip production capacity. In Latin America, Mexico is expected to cut back on imports, but Brazil's production could fall 20 percent, and its wheat imports could more than double.

Competitor Wheat Production Critical in Meeting World Demand

This year, the size of competitors' wheat crops is particularly critical, because their carryin stocks are the lowest since 1973/74 and U.S. supplies are also down. U.S. wheat stocks were nearly halved in the last year, and drought has reduced the 1989/90 winter crop. U.S. exports for 1989/90 (July-June) are forecast to fall 14 percent, with market share likely dropping 5 percentage points to 34 percent.

For coarse grains, in contrast, the impact of competitor changes will be smaller. Although a slight drop in world stocks is expected, the anticipated recovery in crops in the U.S. and several other countries will bring world prices down.

Total foreign wheat production is forecast at a record 476 million tons, with production by the major competitors projected to match the second highest on record. However, because world import demand is forecast only slightly below 1988/89, nearly all the projected increase in competitor production will have to be funneled into exports to meet demand, and to keep prices from rising substantially. Consequently, there will be little stockbuilding.

Competitor wheat area likely will expand 7 percent, given prospects of higher export prices. Yield improvement, particularly in Canada and Argentina, could boost total competitor production 14 percent from 1988/89. Assuming most of the increase goes into exports, competitor exports are forecast up 18 percent.

EC Wheat Output May Rise 4 Percent

EC wheat production is projected to expand 4 percent in 1989/90 to 77.6 million tons, while coarse grain output may drop 9 percent or more. Some of the land planted to barley and oilseeds in 1988/89 was planted to wheat this year, and unusually hot, dry weather has cut coarse grain yields. After record exports in 1988/89, the EC entered 1989/90 with its lowest wheat stocks since 1983/84. But high world prices cut export subsidy costs, and with increased production, the EC could export 21 million tons of wheat, matching last year's record.

Wheat and coarse grain prospects in Canada are much improved from last year, when drought cut the wheat crop by 40 percent and the barley crop by 28 percent. Greater wheat plantings are expected, in part because the spread between initial prices offered by the Canadian Wheat Board (based on expected world prices) for wheat and barley is larger than a year ago. Wheat production could rebound to 26 million tons, more than 10 million tons above 1988/89.

Instead of building wheat stocks, estimated at their lowest since the early 1950's, Canada is expected to take advantage of high world prices and push exports, perhaps to 20 million tons. This almost 50-percent jump would be the biggest increase among exporters, but would still be considerably below 1987/88's record.

Australia's wheat crop is forecast at 14.3 million tons, slightly below 1988/89, based on average yields and a 7-percent increase in area. Initially, favorable early planting conditions and good price

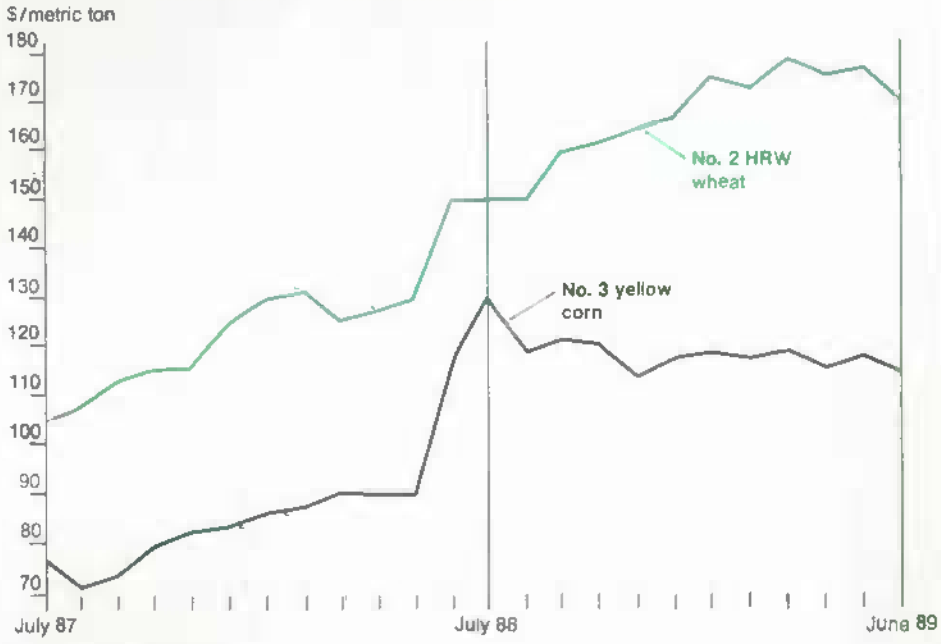
Major Competitors' Wheat Production To Rise, Exports To Surge

	1985/86	1986/87	1987/88	1988/89 P	1989/90 F
	Million metric tons				
Production					
Argentina	8.5	8.9	8.8	7.8	10.5
Australia	16.1	16.1	12.4	14.5	14.3
Canada	24.3	31.4	26.0	15.7	26.0
EC	71.6	72.0	71.4	74.7	77.6
Total	120.5	128.4	118.6	112.6	128.4
Exports*					
Argentina	6.1	4.3	3.7	3.5	5.7
Australia	16.0	14.8	12.2	10.7	11.0
Canada	16.8	20.8	23.6	13.5	20.0
EC	15.6	16.4	15.3	21.0	21.0
Total	54.5	56.3	54.8	48.7	57.7

*July-June trade year, excluding intra-EC trade.
P = preliminary. F = forecast.

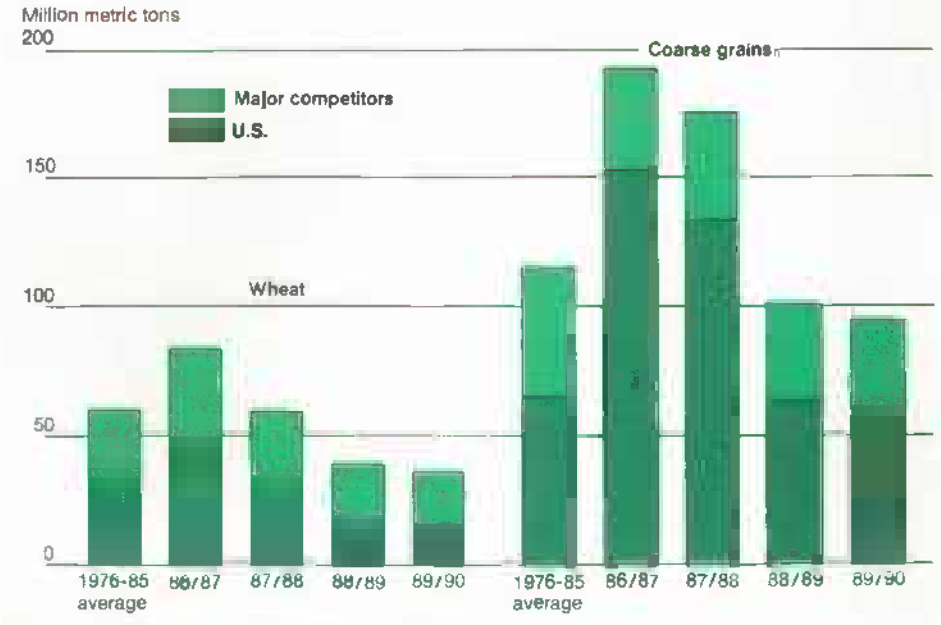
Source: USDA estimates.

Price Spread Between Wheat and Corn Widens



Prices monthly, f.o.b., Gulf.

No Recovery In World Grain Stocks Seen In 1989/90



Ending stocks 1988/89 and 1989/90 forecast.

prospects were expected to prompt a larger gain in area. However, wet fields recently prevented some planting, and led to last-minute switching to barley. For many producers, high prices for wool, beef, and legumes will continue to make them attractive alternatives to wheat. Australia is forecast to increase exports 3 percent to 11 million tons, and to boost stocks only marginally.

Hyperinflation Could Limit Argentine Area Expansion

While high world prices would normally encourage robust area expansion in Argentina, the actual increase could be more modest. Hyperinflation, scarce agricultural credit, and plummeting farm input sales are limiting factors. While the differential exchange rate for agricultural exports has been eliminated, export taxes were reimposed in April. Yet the new government has begun efforts to stabilize the economy and provide incentives for farmers.

Moreover, planting conditions in Argentina have been excellent. A rebound in yields after the 1988/89 drought could still bring wheat production up one-third, and also allow a turnaround in corn. Argentina is projected to increase wheat exports 63 percent to 5.7 million tons in 1989/90. The country typically holds minimal stocks, so no stockbuilding is forecast.

At this point, winter wheat crops in the Northern Hemisphere have largely been harvested. With almost all the Southern Hemisphere's plantings nearing completion, world wheat supplies will remain tight and prices firm. For coarse grains, the supply and price outlook is less clear. For Northern Hemisphere coarse grain crops, the outlook is mixed, while planting is still a few months away in the Southern Hemisphere. *[Pete Riley and Sara Schwartz (202) 786-1825]*

Greenhouse and Nursery Growth Slows

Growth in greenhouse and nursery product sales slowed in 1988. While the total value of domestic greenhouse and nursery production continues to climb, imports are rising faster and taking a higher percentage of the domestic market. Domestic output of several categories of greenhouse and nursery products fell in 1988, in part reflecting last summer's drought. Also during the drought, retail demand for outdoor plants for landscaping and gardening wilted.

Consumers Spent Over $27 Billion Last Year

Total consumer expenditures for greenhouse/nursery products may have exceeded $27 billion in 1988. This includes retail sales of cut flowers, potted foliage, blooming plants, and landscaping plants, but excludes the value of services such as landscaping itself, related labor and materials, and product resales. The 1988 total was only $10 billion less than the value of retail sales of fresh fruit and vegetables that year.

According to industry figures, consumer spending for floral and potted plant items was $9.9 billion in 1988. Adjusted for inflation, this is a 46-percent increase from 1982. The total breaks down to an average of about $40 a person last year, up $16 from 1982.

Retail sales in florist shops have risen sharply, going from $3.8 billion in 1982 to $5.9 billion in 1988. The number of flower shops climbed to 36,200 in 1988, almost 20,000 more than in 1954.

Most of the floral market expansion has been going to nonflorist outlets, primarily supermarkets. According to a recent industry study, 86 percent of all grocery store chains now carry floral products, with 52 percent devoting an entire department to flowers and plants. The study says that grocery chain floral sales have doubled over the last 4 years, and that the potential for continued growth is large.

Other Indicators Show Rapid Growth

Just-released data from the Census of Agriculture show that agricultural products sold by greenhouses and nursery farms in 1987 totaled $5.77 billion, a 51-percent jump since 1982. The number of growers also increased, from 35,507 in 1982 to 37,298 in 1987. Average sales per farm rose 44 percent, reaching $154,818, about triple the value for all U.S. farms. Greenhouses and nursery farms accounted for 11 percent of all farm crop cash receipts in 1987.

In 1988, cash receipts of greenhouse and nursery growers hit an estimated record $6.9 billion, 10 percent more than the combined value of the cotton and tobacco crops. Unlike other commodities, floriculture and horticulture products have achieved this growth without direct Government payments, crop subsidies, or other Federal programs.

U.S. Growers Struggling With Foreign Competition

The U.S. market for greenhouse/nursery products is expanding, but lower priced imports are absorbing most of the gain. Foreign suppliers are aggressive, consistently delivering high-quality products while improving their production and marketing.

U.S. producers' share of the domestic greenhouse/nursery market slipped in 1988. Cut flower growers lost market share because of a 16-percent increase in imports. In 1988, foreign suppliers controlled 40 percent of the U.S. cut flower market, compared with 37 percent the year before. Since 1985, imports of cut flowers and decorative greens have jumped 53 percent.

International competition is also cutting into the market for live plants and other greenhouse and nursery products. Imported nursery products increased 10

Colombia is the Major Source of Ornamentals and Miami the Major Entry Port

Commodity and origin	Atlanta, New Orleans, and Texas 1/	Boston and Chicago	Miami and Winter Park, Florida	New York City	San Francisco and Seattle	Total
			Units of 1,000-stem count, 1988			
WHAT ORNAMENTALS GO WHERE						
Alstroemeria	57	291	78,473	2,400	362	81,583
Carnations 2/	4,232	1,080	1,114,307	27,243	263,877	1,410,739
Chrysanthemums 2/	6,304	226	530,490	4,465	119,059	660,544
Daisies	51	4	2,416	17,685	D	20,156
Freesia	430	6,187	1,626	22,465	2,430	33,138
Gerbera	261	621	26,728	5,170	292	33,072
Gladiolus	360	426	73,325	1,446	963	76,520
Gypsophila 2/	1,275	225	151,075	11,875	1,525	165,975
Iris	263	4,134	4,310	15,712	2,114	26,533
Lilies	329	3,621	7,259	19,704	1,665	32,578
Roses	21,041	2,332	250,926	8,059	230,119	512,477
Statice 2/	41,388	12	24,372	3,528	12,720	82,020
Tulips	765	8,782	2,457	24,612	5,277	41,893
Other cut flowers	8,857	9,382	85,386	43,690	19,499	166,814
Cut greens	13,688	151	4,855	5,231	160	24,085
WHERE SHIPMENTS COME FROM						
California	0	0	0	0	579,602	579,602
Florida	0	0	122,842	0	0	122,842
Colombia	34,706	0	1,969,841	2	592	2,005,141
Costa Rica	374	0	77,841	17	1,371	79,603
Ecuador	1	3	67,788	853	1,133	69,778
Guatemala	1,762	0	21,662	30	0	23,454
Israel	29	1,333	0	47,465	2,941	51,768
Mexico	55,287	77	9,295	18,008	48,353	131,020
Netherlands	3,270	33,469	16,445	131,778	15,131	200,093
Peru	0	0	47,633	0	146	47,779
Others	3,872	2,592	24,658	15,132	10,793	57,047
Domestic 3/	0	0	122,842	0	579,602	702,444
Imported	99,301	37,474	2,235,163	213,285	80,460	2,665,683
Total	99,301	37,474	2,358,005	213,285	660,062	3,368,127

1/ Includes Dallas, Houston, San Antonio, and Weslaco ports. 2/ Miniature carnations converted to stems at 10 stems per bunch; gypsophila, 25 stems/bunch; pompon chrysanthemums, 6 stems/bunch; and statice, 12 stems/bunch. 3/ Includes only California and Florida ports listed.

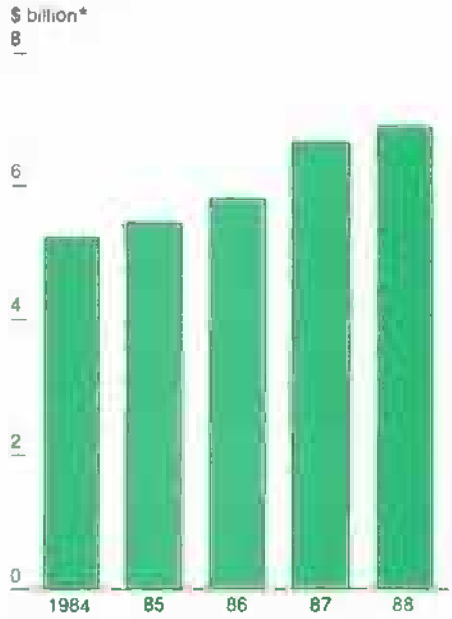
Source: Agricultural Marketing Service, USDA. Based on APHIS inspections.

percent in 1988 to $146 million. In addition, last year the U.S. imported about $81 million worth of seeds in the flower, vegetable garden, and nursery categories, up 12 percent from 1987.

Although the U.S. is still a major net importer, U.S. exports of greenhouse and nursery products reached a record $84 million last year. Canada buys most U.S. exports, but Canada's floral and nursery industries are expanding rapidly, hoping to export more to the U.S.

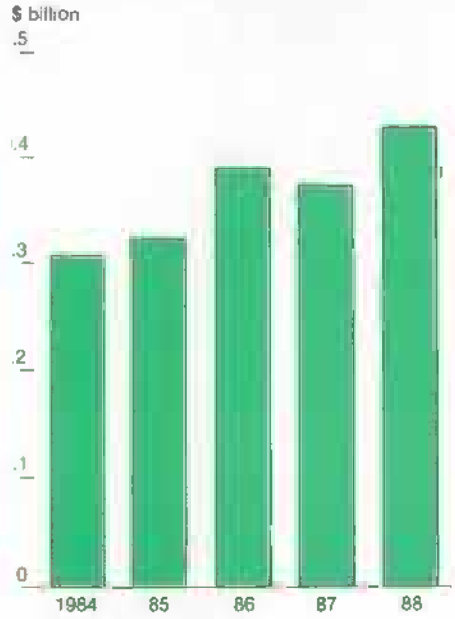
Cut flower growers in the U.S. want to ship more to Far Eastern markets and the EC. However, EC duties are high, and the EC has other trade barriers that restrict imports. The Netherlands, Spain, and Denmark are especially likely to continue expanding domestic production and exports, putting more pressures on world floriculture markets. Mexico and other Latin American countries are also expected to increase flower and plant exports, targeting mainly U.S. markets.

Domestic Growers' Receipts Higher For Greenhouse/Nursery Products. . .



*Farm value; excludes food crops

. . .But Imports Are Rising Faster



USDA To Allow New Plants In

After January 1990, USDA's Animal and Plant Health and Inspection Service will announce new types of plants, rootings, and cuttings that will be allowed to enter the U.S. About 50 new plant genera, or at least 1,000 new species, could be added to the list. U.S. growers are concerned about the plant diseases and insects that could be introduced by an influx of newly imported plant materials.

Additional imports of plants and propagative materials will diversify the products available in the U.S., but will also increase competition for domestic growers.

Carnation Imports Through Miami Are Big

In 1988, imports of roses were up 18 percent; foreign suppliers increased their share of the U.S. market to 36 percent. Carnation imports increased 8 percent; foreign suppliers now serve over two-thirds of the U.S. market. Chrysanthemum imports fell owing to slower demand, but over half of the market is supplied by imports. Imports of tropical and "Dutch type" flowers have made big gains in recent years. Imports of these other cut flowers now account for 51 percent of the U.S. market.

USDA's Economic Research Service recently analyzed imported and domestic ornamental crops moving through 15 major ports of entry and shipping points. A total of 3.37 billion stems of cut flowers and greens moved into U.S. marketing channels last year. About 79 percent were imported. Colombia supplied 75 percent of the total imports, the Netherlands 8 percent, and Mexico 5 percent.

Miami was the dominant port of entry with 84 percent of the import volume, followed by New York City with 8 percent. Of the total available domestic shipments and imported product, 42 percent consisted of carnations, 20 percent of chrysanthemums, and 15 percent of roses.

Economic and Trade Factors May Dampen U.S. Expansion

Costs, mainly labor and energy inputs, continue to rise for U.S. growers, while prices received have been almost flat. When adjusted for inflation, producer prices have generally fallen, putting some U.S. growers in a cost-price squeeze and allowing foreign competitors to penetrate the U.S. and other markets.

The U.S. industry would benefit from:

- more automated, cost-effective production facilities;
- improved packaging, handling, and distribution;
- trade agreements to expand exports and open new markets;

- greater marketing efforts to boost domestic sales, especially nonoccasion purchases; and

- more biological, statistical, and economic research.

Potential for Growth Is Huge

Although consumer spending on flowers and plants is cooling off, there appears to be a large potential for growth. Consumption rates in the U.S. are relatively low compared with those in Europe. For example, in the U.S., per capita purchases of cut roses were 3.5 stems in 1988; carnations, 5 stems; and chrysanthemums, only 2 stems.

The Dutch buy flowers more frequently than anyone else in the world. They purchase flowers on average 155 times each year, while people in the U.S. buy only 12 times annually.

As the world's top producer of flowers and plants, the U.S. could become a leading exporter. But to boost exports, U.S. growers need to cut production costs and improve marketing techniques. For example, despite also having relatively high wages, the Dutch are leading exporters because they use automated production processes and a low-cost auction marketing system.

Total world imports of cut flowers, cut foliage, and plants may have reached $3.0 billion in 1988, and could hit $3.5 billion by 1990. By value, the U.S. share of world floriculture trade is less than 1 percent. *[Doyle Johnson (202) 786-1883]*

World Agriculture and Trade

Program Boosted Wheat Exports

USDA's Export Enhancement Program (EEP) boosted U.S. wheat exports 10 to 30 percent in 1986/87 (June-May), according to several recent studies. But the studies also show that, despite the marked growth in wheat shipped with EEP support in 1987/88, wheat export increases due to the program that year were significantly less than in the previous year.

Estimates of the EEP's role in boosting U.S. wheat exports are subject to uncertainty, since they depend on assumptions about how competing countries and importers would have behaved had the EEP not been in place. However, the recent studies suggest that EEP is more effective in years when world stocks are high, U.S. supplies are large, and world competition is keen. This was the case in 1986/87.

But when world supplies are tight and importer demand is up, the EEP is less important. Aside from the EEP, lower U.S. support prices, the dollar's depreciation, and drought-reduced competitor supplies have increased U.S. exports since 1985.

The U.S. share has increased in specific wheat markets targeted under the EEP, particularly certain North African markets. The U.S. boosted its share of the Moroccan wheat market from about 50 percent to nearly 100 percent from 1985/86 to 1987/88. The U.S. share of the Algerian market rose from 25 percent in 1984/85 to over 70 percent in 1986/87. These gains have come at the expense of the EC, a subsidizing competitor.

From the program's inception in 1985 through mid-July this year, EEP bonuses valued at $2.6 billion have been used to move $8.4 billion worth of commodities into the international market.

How EEP Works

The EEP operates under a two-step, competitive bid process. Initially, USDA's Commodity Credit Corporation (CCC) announces that importers in a given country may make an offer for a specific quantity of a commodity eligible under the EEP.

Then, U.S. exporters compete to sell to the targeted country. The exporters arrange sales contingent on receiving a CCC bonus, and then bid against each other for the bonus. The CCC evaluates both the sales prices quoted to the importing country and the bonus bids. Exporting companies are awarded the bonuses if the offered prices and bonus quantities fall within predetermined ranges.

After exporting the commodity sold, the companies collect the bonuses. Bonuses are paid in the form of generic certificates that can be sold for cash or redeemed for CCC-held commodities (see the special article in the June *Agricultural Outlook* for more on certificates).

Bulk of Bonuses Moved Wheat

By value, about 85 percent of the EEP-assisted sales have moved wheat into the international market. Barley is next in importance, followed by wheat flour and vegetable oils. Smaller totals of frozen poultry, table eggs, rice, dairy cattle, sorghum, semolina, barley malt, and poultry feed have also been sold under the EEP.

Almost half of all U.S. wheat exports since the program began have involved EEP bonuses. EEP wheat sales began at 3.5 million tons in 1985/86 (June-May), then quadrupled in 1986/87, peaked at 25.5 million tons in 1987/88, and fell to 20.2 million in 1988/89. At the same time, total U.S. wheat exports rose from 24.6 million tons in 1985/86 to 41.6 mil-

lion in 1987/88, but dipped slightly in 1988/89 as the 1988 drought reduced exportable supplies and world imports fell.

More Than 44 Countries Have Bought Wheat Under EEP

In the program's first year, North African and Middle Eastern countries were the main wheat purchasers, and those areas now account for one-third of all EEP wheat sales. After the first year, the program expanded to other countries, such as the Soviet Union and China.

Almost half of all EEP wheat sales have been directed to the USSR and China. In 1987/88, the U.S. sold 8.8 million tons to the Soviet Union and 4.9 million tons to China. Sales to China increased in 1988/89, while relatively lower coarse grain prices encouraged Soviet importers to purchase more corn and sorghum (without EEP bonuses) than wheat under the EEP.

U.S. grain merchants have also sold wheat with EEP bonuses to many other countries in Latin America, Eastern Europe, West Africa, and Asia, although these nations have accounted for less than 20 percent of all EEP wheat sales.

Barley has accounted for only 6 percent of total EEP sales, but almost all barley exported from the U.S. in 1986/87 and 1987/88 (June-May) was sold under the EEP. In 1986/87, the first year of EEP barley exports, sales abroad increased almost 70 percent over the previous 5-year average. In 1987/88, total and EEP-supported barley exports declined slightly. In 1988/89, EEP barley sales dropped by a third, but non-EEP sales to countries such as Japan picked up. Top barley purchasers under the EEP have been Saudi Arabia, Algeria, and Israel.

EEP Covered Almost Half Of Flour Exports

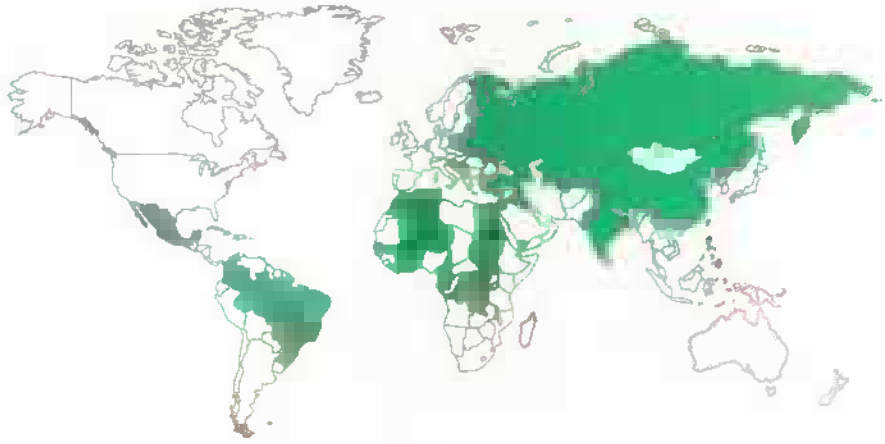
For wheat flour, EEP shipments in 1986/87 and 1987/88 (June-May) accounted for almost half of total U.S. exports. Egyptian importers have purchased over 60 percent of the flour sold under the EEP since May 1985. Iraq and Yemen were the second and third leading destinations.

Wheat Dominates EEP Sales 1/

Commodity	Unit	1985/86	1986/87	1987/88	1988/89 2/	Total
Wheat	1,000 mt	5,300	14,388	26,296	15,160	61,144
Flour 3/	1,000 mt	1,200	901	442	638	3,181
Barley	1,000 mt	900	3,359	1,701	511	6,471
Sorghum	1,000 mt	0	106	213	0	319
Barley malt 3/	1,000 mt	6	135	72	4	217
Vegetable oils	1,000 mt	0	25	357	69	451
Frozen poultry	1,000 mt	43	95	13	2	153
Rice	1,000 mt	23	28	120	20	191
Table eggs	1,000 dozen	0	21,500	10,750	2,264	34,514
Dairy cattle	1,000 head	6	52	12	0	70

1/ Fiscal years (October-September). 2/ 1988/89 sales are as of July 14, 1989. 3/ In grain equivalents.

EEP Wheat Sales Have Been Targeted at EC Export Markets



U.S. exporters made their first vegetable oil sales under the EEP in the 1986/87 crop year (October/September). Sales of soybean, sunflowerseed, and cottonseed oil under the EEP topped 350,000 tons in 1987/88, but declined in 1988/89.

Nevertheless, in 1987/88, over 40 percent of U.S. sunflowerseed oil exports and over 20 percent of U.S. soybean oil exports were shipped under the EEP. Most of the soybean oil was sold to Indian and Tunisian importers, while Algeria purchased most of the sunflowerseed oil. About one-quarter of all U.S. vegetable oil exports were channeled through the EEP in 1987/88. *[Karen Ackerman (202) 786-1821]*

Third World Debt Cuts U.S. Farm Exports

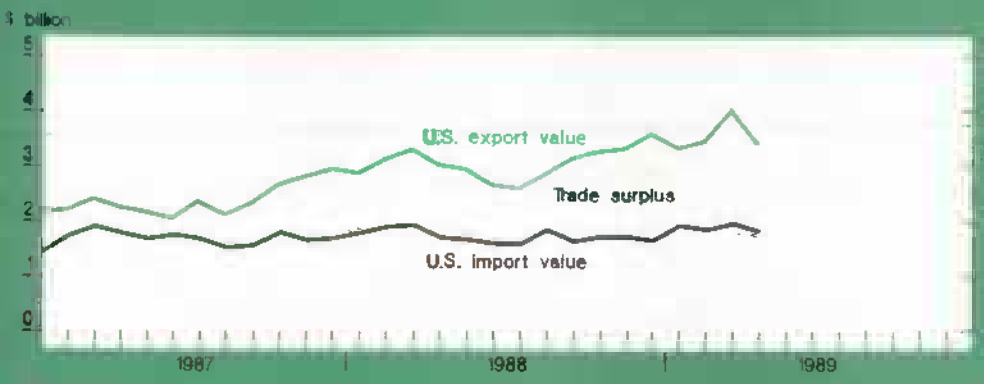
Third World debt is one of the most serious constraints to agricultural trade in the 1980's. Estimates made by USDA's Economic Research Service suggest that the Third World debt problem has reduced U.S. agricultural exports by about $3 billion a year since 1982.

The debt problem has proved to be highly intractable, and will probably limit growth in the world economy for years to come.

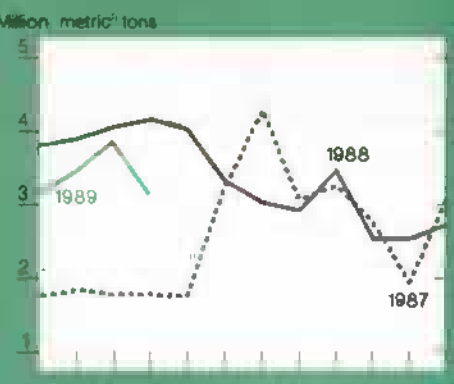
Before the debt problem, developing countries were the fastest-growing market for U.S. agricultural exports. During the 1970's, developing countries increased their purchases of U.S. farm products by nearly 11 percent per year, after inflation. By contrast, in the 1980's their purchases declined at an annual rate

U.S. Agricultural Trade Indicators

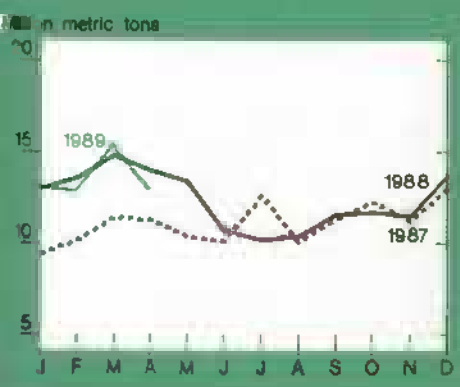
U.S. agricultural trade balance



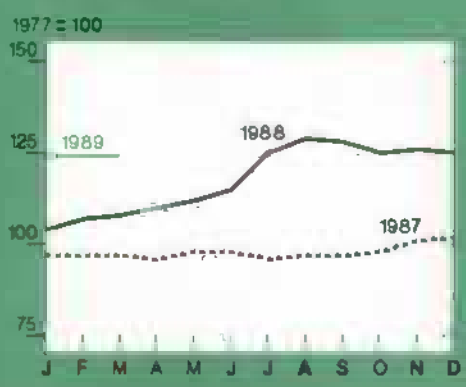
U.S. wheat exports



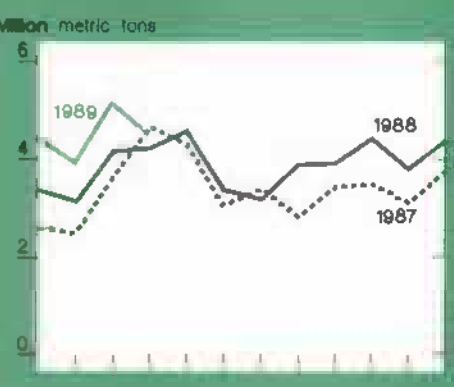
Export volume



Index of export prices

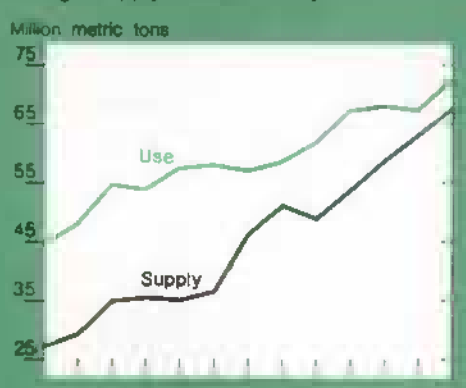


U.S. corn exports

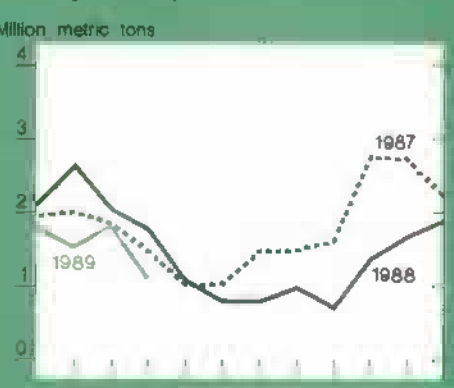


Foreign supply & use of coarse grains

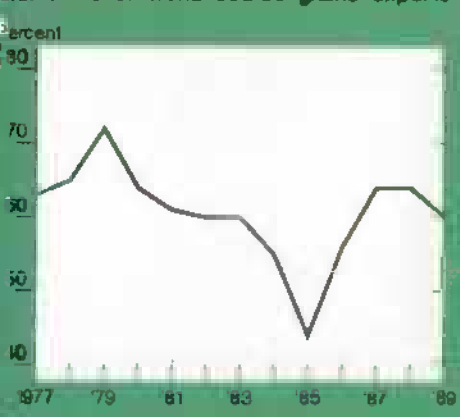
Foreign supply & use of soybeans



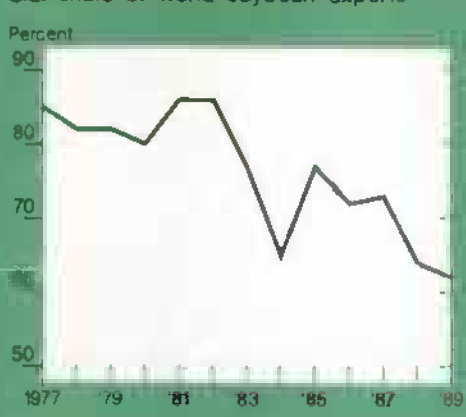
U.S. soybean exports



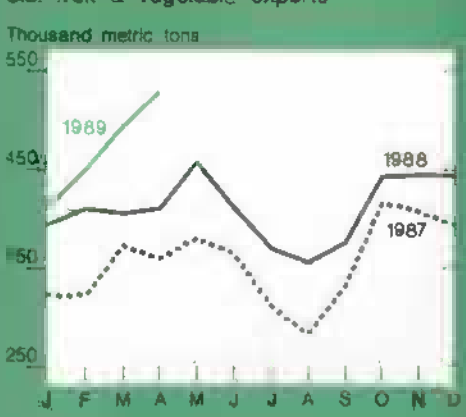
U.S. share of world coarse grains exports[1,2]



U.S. share of world soybean exports[1,2]



U.S. fruit & vegetable exports[3]



[1] Excluding intra-EC trade [2] October-September years. [3] Includes fruit juices.

of 4 percent. Even so, the developing world's share of U.S. agricultural exports has risen to over 40 percent.

Debt Problem Cuts Imports, Investment

The debt problem has constrained imports in two ways. First, governments' immediate response to a debt repayment problem is to reduce imports, freeing foreign exchange earned from exports for additional debt payments.

Second, in the longer term, debt payments compete with investment for national savings. Reduced investment lowers long-term economic growth, and thereby shrinks demand for U.S. agricultural products. Investment and economic growth have slipped substantially among debt-affected developing countries since the debt problem ballooned in 1982.

Between 1973 and 1981, U.S. agricultural exports to countries currently classified as "problem" debtors climbed an average 15.4 percent annually. However, between 1981 and the end of 1987, exports fell an average 10 percent annually. The share of total U.S. agricultural exports going to problem debtor countries rose to 14 percent in 1980, but has since fallen to 10 percent. Without substantial debt relief, these countries will become stagnant markets for U.S. farm products.

In the longer term, the debt crisis has lowered developing countries' incomes, in both absolute and relative terms. Real income growth per capita in all developing countries averaged only about 1 percent a year between 1980 and 1986, compared with more than 3 percent in the 1970's. As for problem debtor countries, real per capita income in the 1980's declined by 2.4 percent.

Capital Leaves Debt-Affected Countries

On average, the developing countries received net financing of more than $30 billion a year between 1974 and 1981, but they have paid out $30 billion in extra repayments per year since 1984. The consequence is that the most heavily indebted nations have seen domestic capital formation fall from an average of over 27 percent of national income during the 1970's to below 18 percent in the 1980's. Local investors, wary of their countries' shaky economies, have sent capital out of the Third World. The resulting slow economic growth has reduced demand for U.S. farm products.

The problem of debt constraints is not limited to U.S. agriculture. Real trade in all goods has fallen off. In 1980 dollars, the U.S. has been exporting 2 percent less every year, on average, to the developing world over this decade.

In contrast to the debt-constrained countries, the "four tigers" of East and Southeast Asia (Hong Kong, the Republic of Korea, Singapore, and Taiwan) have used their burgeoning export earnings to increase imports. U.S. agricultural exports to these countries increased 54 percent between 1986 and 1988, compared with 34 percent for all U.S. agricultural exports.

Brady Plan Could Defuse Crisis, But Recovery Will Be Slow

In the effort to solve the Third World debt problem, more flexible, market-oriented strategies have begun to appear. In March, U.S. Treasury Secretary Nicholas Brady proposed that international organizations, governments, and commercial banks become involved in a three-pronged effort: debt reduction, new funds, and economic policy reforms to stimulate growth in developing countries. These strategies will help defuse the immediate debt crisis. These are only first steps, however; Third World debt will continue to be a serious trade impediment for some time.

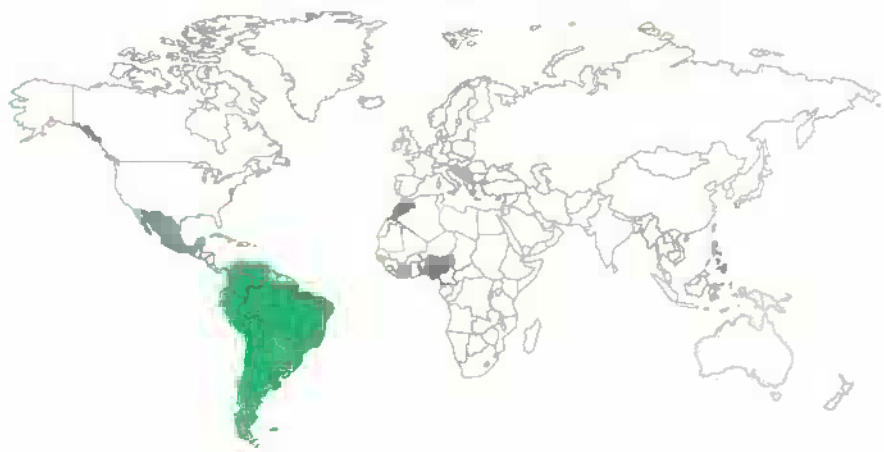
The magnitude of developing countries' international debt—almost $1.2 trillion—will continue to hamper attempts to achieve faster growth. In the last 2 years, voluntary debt reductions by private banks, mainly through discount sales in the secondary loan markets, have already reduced developing countries' debt by about $24 billion.

For the debt-affected developing countries, debt service payments have exceeded 40 percent of export earnings in the 1980's. For all developing countries, debt service payments have exceeded 20 percent of exports during the 1980's, compared with only 12 percent for the 1970's. Rising debt-service payments are highly correlated with the declines in gross domestic capital formation in the 1980's.

Policy Reforms Needed To Spur Growth

With their long-term economic capacity reduced, debt-affected nations are attempting to get back on a growth path. The real per capita income in the most indebted countries is 7 percent less than it was at the beginning of this decade. Strong growth is needed just to regain the per capita income of 1980.

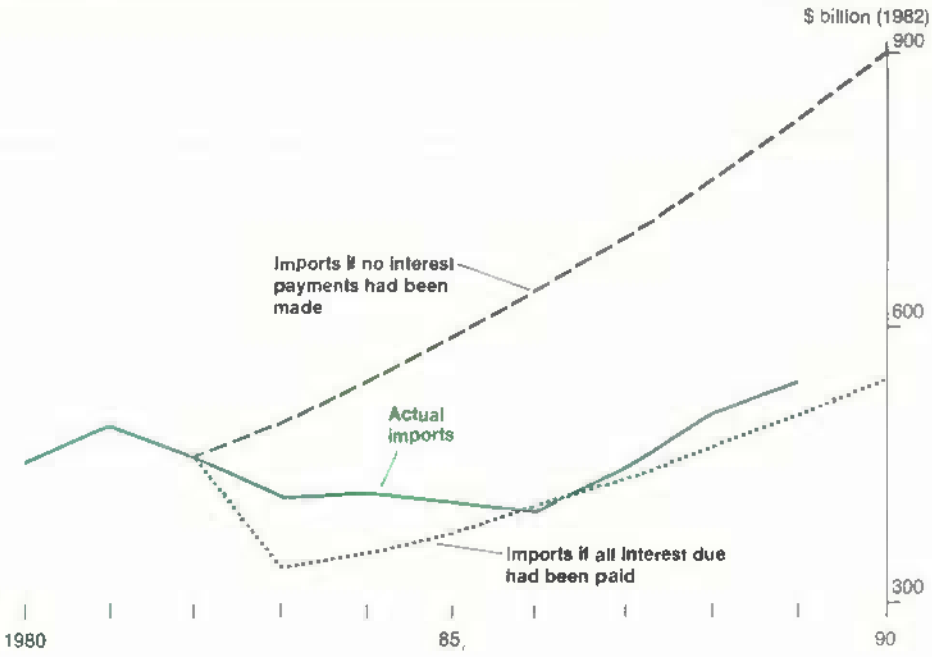
Highly Indebted Nations
Clustered In Latin America, Africa



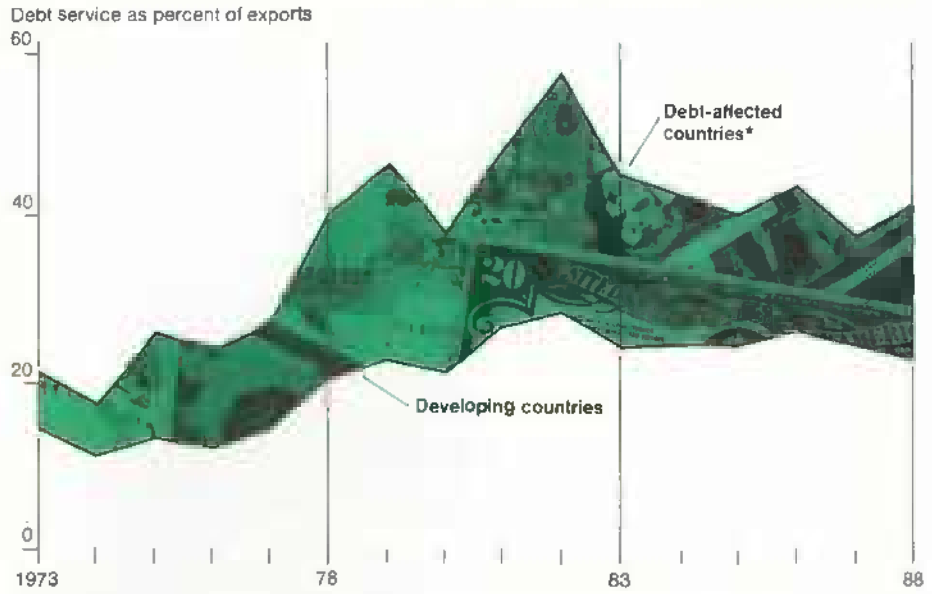
The developing countries could adopt trade, structural, fiscal, and monetary policies to promote growth. They cannot afford, in today's international economic environment, current policies such as food subsidies (which tend to exaggerate the need for food) and overvalued exchange rates (which implicitly tax farmers producing for international markets).

Reforms in the international trading system would improve the outlook for debt-affected countries. The policy-induced distortions that permeate world trade seriously hinder developing countries' export industries. Removing trade-distorting policies of developed countries will help facilitate the reform of developing countries' economies. Current discussions in the Uruguay Round of the General Agreement on Tariffs and Trade could move world trade practices a long way toward this objective. *[Matthew Shane (202) 786-1664]*

Interest Payments Have Cut Debtor Nations' Imports



For Some Countries, Debt Service Equals 40 Percent of Exports



*Having international debt over $10 billion and suffering repayment problems after 1982. Includes Morocco, Nigeria, Philippines, Argentina, Brazil, Chile, & Mexico.

What's Behind the $3-Billion Estimate

To estimate the effects of the Third World debt problem on U.S. agricultural exports, ERS compared the actual outcome of trade against a hypothetical alternative which removes the debt constraint. A trade model was built that took into account debt repayments as a constraint on imports and growth.

Separate scenarios were run to compare a fully debt-constrained Third World—where the countries cut imports and investment to keep current on all debt payments—against an alternative where the countries could continue unrestricted borrowing.

The simulations began with 1982, the year the debt crisis started. The actual history was then plotted against the simulations to estimate the difference between the unconstrained growth case and the actual performance of GNP, investment, and imports in the developing world. The changes in imports were then apportioned between agricultural and nonagricultural products, based on long-term trends.

Farm Export Value Up, Volume Down

U.S. agricultural exports in fiscal 1989 are forecast to reach $39 billion, the highest since 1982. In real terms (deflated by the U.S. consumer price index), export value is expected to be the highest since 1984. Export volume, however, is expected to decline. Smaller wheat, soybean, and soybean meal exports are expected to offset larger coarse grain exports.

With prices for grains and oilseeds well above a year earlier, export value is forecast up $3.7 billion from 1988. Although total U.S. agricultural exports remain well below the highs of 1980 and 1981, some regions, including Japan, other East Asian countries, and the Soviet Union, will import record amounts of U.S. farm products. However, in inflation-adjusted terms, the value of exports to Japan and the Soviet Union is expected to remain below the record.

Grain Exports Rising $4 Billion

Greater grain exports account for much of the increased value forecast in fiscal 1989. Oilseed and product exports will probably fall $1 billion, while livestock, horticultural, and tropical product exports are expected to gain about $1 billion altogether. Grain export volume is expected to surpass 100 million tons for the first time since the early 1980's, but higher prices account for most of the expected $4-billion jump in grain export value.

The volume of wheat exports likely will decline about 2 million tons in fiscal 1989, while value climbs from $4.6 billion to $6.2 billion. Export value has been boosted by higher world prices in the wake of last summer's drought-induced shortfalls in the U.S., Canada, and Argentina. More recently, poor production prospects for the U.S. winter wheat crop continue to bolster prices, and exportable supplies remain relatively low in most countries.

With wheat exports dropping, and U.S. rice exports forecast only slightly higher, larger coarse grain exports are almost entirely responsible for pushing U.S. grain export volume higher. Smaller supplies of coarse grains in Argentina, Thailand, and Eastern Europe account for some of the increase, with U.S. export volume expected to rise 9 million tons. With prices higher as well, coarse grain export value is likely to climb from $5.2 billion in fiscal 1988 to $7.5 billion this fiscal year.

Soviet Sales Already Surpass Last Year's Total

The most important factor boosting U.S. coarse grain export values is increased demand from the Soviet Union; Soviet purchases are expected to reach a record $3.4 billion. Soviet grain purchases from the U.S. have already reached an all-time high this year, with sales as of mid-June totaling about 21 million tons, more than 30 percent above last year. The USSR will be the U.S.'s largest grain customer during fiscal 1989.

While Soviet purchases of U.S. wheat are expected to decline, Soviet purchases of U.S. corn are expected to nearly triple. Higher corn sales partly reflect:

- reduced Soviet coarse grain and forage production in 1988;
- tight corn supplies in competing countries and prices favoring U.S. corn over EC feed wheat and Canadian barley; and
- continued Soviet emphasis on boosting livestock production.

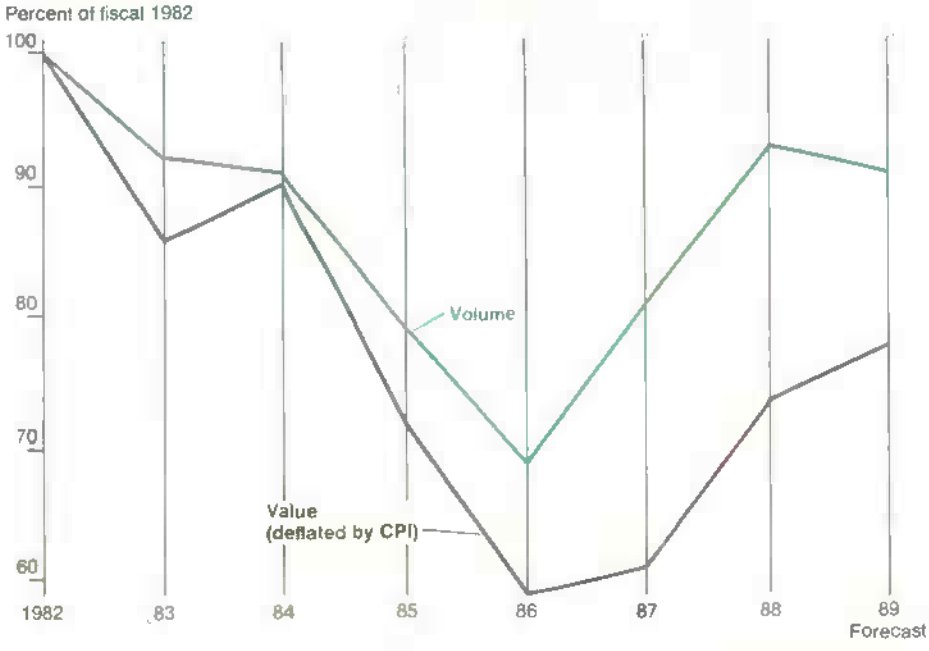
While U.S. agricultural sales to the Soviets are record high in current dollars and tonnage, exports were higher in 1979 in inflation-adjusted dollars. Soviet farm purchases from the U.S. are almost exclusively composed of bulk, low-value goods. Historically, prices of these and other unprocessed goods have lagged general price changes, particularly during the 1980's. Thus, while exports to the USSR will reach a record volume this year, their real returns to the U.S. economy will remain only near-record.

U.S. Soybean and Soybean Meal Exports Fall

Excluding corn gluten meal, exports of oilseeds and products are expected to reach $6.8 billion in fiscal 1989, a $1-billion decline from 1988. A 5.9-million-ton drop in soybean exports and a 1.4-million-ton reduction in soybean meal tonnage are forecast to more than offset higher prices. In inflation-adjusted dollars, oilseed and products export value is expected to be the smallest since 1972. In tonnage, these exports are expected to be the smallest since 1977.

World trade in soybeans and soybean meal combined is forecast lower during 1989, but competitors' exports are expected to rise. The U.S. likely will lose market share as it is squeezed between reduced demand in major markets, such as the EC, and record South American production.

Farm Exports Continue Rise in Value, But Volume Slips



U.S. Exports to EC Are Declining

During the first 8 months of fiscal 1989, U.S. oilseed and product exports to the EC fell $639 million from a year earlier. Typically, 35-45 percent of all U.S oilseed and product exports are shipped to the EC, and reduced oilseed prospects account for most of the $400-million decline expected in agricultural exports to the EC.

Export prospects have been hurt by large supplies of EC oilseeds, higher U.S. prices, and competition from grains within the EC. The EC livestock sector's demand for feedstuffs is down, too. While total EC consumption of oilseed meals could fall 4 percent, or 1.1 million tons, grain consumption is expected to grow faster than it has in 17 years.

Declining U.S. farm exports to the EC this year reversed 2 years of rising sales, which were driven mainly by high-value products. In addition to oilseed exports, meat exports to the EC are expected to fall during 1989. Technical factors hamper the U.S. beef industry's ability to certify internal organs as hormone free, so U.S. meat exports to the EC are now confined to carcasses.

However, import liberalization elsewhere and relatively favorable exchange rates are expected to boost U.S. meat exports to all destinations, driving U.S. animal product exports to a record $6.4 billion. Similarly, liberalization, exchange rates, and continued strong foreign economic growth are expected to result in record exports of fresh and processed produce, $4.1 billion compared with $3.8 billion in fiscal 1988. In both animal and horticultural products, record highs will be achieved in real terms as well.

Much of the increase in high-value exports is going to Pacific Rim customers. With higher sales of beef and other high-value products to Japan, and greater prices for grains and soybeans, U.S. agricultural exports to Japan are expected to be up about $600 million from fiscal 1988's record $7.3 billion.

Exports to Most Customers Lower in Real Terms

As high-value exports hit record highs and bulk exports grow for the third consecutive year, the nominal value of all U.S. agricultural exports will return to the $39 billion last recorded in fiscal 1982. However, inflation-adjusted U.S. exports in 1989 are forecast down 22 percent from 1982, although still up from last year.

Regionally, real export value is forecast to exceed 1982 for Japan, other East Asian countries, the Middle East, North Africa, the USSR, and Mexico. Much of the real decline since 1982 occurred in exports to Western Europe, but exports to Eastern Europe and most of Latin America fell as well, largely because they needed to use their foreign exchange to pay off their international debts.

Long-Term Constraints Face U.S. Exports

There are three serious constraints on the value of U.S. agricultural exports. They help explain why agricultural exports remain less than record while world trade and U.S. nonagricultural exports hit record highs. One is the Third World international debt problem (see above article). The second is the transformation of the EC from a major customer for grains into a competitor. The third is that unprocessed, undifferentiated products dominate U.S. agricultural exports.

Unless world agricultural trade liberalization proves more extensive than expected, the EC is unlikely to become a major U.S. customer again. And a rapid transformation of U.S. agricultural exports from largely bulk to largely high-value is also unlikely.

So, the ability of U.S. agricultural exports to surpass the record real levels achieved at the beginning of the 1980's will remain constrained by structural changes in world markets and the long-term decline in relative prices for primary products. *[Stephen MacDonald (202) 786-1822]*

Farm Finance

State Credit Programs Phasing Down

Federal credit subsidies to farmers are well known, but States have also subsidized farm borrowers. Driven by expectations of rising farm income, prices of farmland grew rapidly during the 1970's, making it increasingly difficult to enter farming. By the late 1970's, some States had responded with programs to help beginning farmers.

The onset of the farm financial crisis in the early 1980's led to a new set of problems and to more State programs. As farmland values and incomes fell sharply, agricultural lenders watched nonperforming loans pile up; loan defaults and losses increased.

In dealing with these varying economic conditions, State governments either increased agricultural lending via incentives to private lenders, reduced the cost of credit to the borrower, or made direct loans. Many programs combined these subsidy types.

State Programs May Have Peaked At $45 Million

State credit subsidies to farmers may have peaked at $45 million in 1987, near the end of the farm financial crisis. While they have declined somewhat since then, a renewal of farm financial stress could again swell the States' burdens.

In 1987, the value of State programs was about 2 percent of the value of Federal farm credit subsidies offered through the Farm Credit System (FCS) and Farmers Home Administration (FmHA). States with the biggest programs include Hawaii, Alaska, Wyoming, Missouri, and Ohio.

State agricultural finance programs have operated differently than Federal ones. State programs have tended to be more diverse, have a fixed duration or sunset provision, or be low-budget. State legislatures have been mindful of the broad Federal credit programs available, as well as of State budget constraints (most States have effective balanced budget requirements).

Some States Lend Directly to Farmers

For direct loans to farmers, States adopted differing methods of funding. Some used direct appropriation from State revenues. This has largely ended, although total cost is as yet unknown because some loans have yet to mature.

A second method used a revolving loan fund, with the State providing the initial fund base. Repayment of principal and interest replenishes the fund for future loans. Additional appropriations may be needed to replace defaulted loans or to deepen fund capacity.

A third method used tax-exempt bonds. Several States adopted this approach for funding "beginning farmer" programs in the late 1970's and early 1980's.

However, the Federal Tax Reform Act of 1986 eliminated almost all activity in this area. For bond purchases, the act placed restrictions on qualifying for tax-exempt status and eliminated the interest deduction that made the bonds attractive to commercial banks, a major purchaser. For the States, this funding approach meant shouldering administrative expenses and borrower defaults, but to the Federal Government it spelled lower tax receipts.

Linked-Deposit Programs Are Popular

Programs that reduced farm borrowers' credit expenses were widely used during the farm financial stress of the 1980's. Perhaps the single most popular innovation was the linked-deposit program.

The State and a lending institution would make an agreement wherein the State would deposit its treasury funds at below-market rates, and the lender would make agricultural loans at preferential terms (generally a reduced interest rate). Linked-deposit programs have been popular because they require no direct outlays (although there are opportunity costs) and the lender assumes all default risk.

Several States step in and pay off farmers' debts. Some States pay the lender to defer farmers' payments. Interest does not accrue on the deferred payments. Sometimes the State negotiates with the lender to get the lender to bear some of the cost.

Other credit cost-reducing programs include add-ons and shared loans. For add-ons, the State adds to an interest buydown already provided by FmHA or the FCS, reducing the farmer's interest rate still further. Shared-loan programs are combinations of two loans, one from a private lender and a second from the State, the latter having preferential repayment terms.

State tax credits have been extended to lending institutions to encourage agricultural lending, or to reimburse farm loan losses. State-level loan guarantees or insurance have been extended to agricultural loans, so that default risk is transferred to the State. At least one State buys guaranteed FmHA loans made by private lenders and holds them to maturity.

Other Farmer Assistance Programs Not Linked to Credit Markets

Some States offer debt mediation, stress-related crisis hotlines, training for farmers leaving agriculture, and free legal services.

Several States have enacted farmland preservation initiatives, reflecting concern about disappearing farmland. These programs generally involve tax credits or concessions to preserve or conserve agricultural land.

Agricultural processors have benefited from some State programs. The focus has varied among incentives to locate processing facilities within the State, expand capacity, and promote diversified production.

Recognizing the importance of exports, some States have instituted programs for marketing agricultural products. States have hosted delegations of foreign governments. They have sponsored "new crops" programs to expand their agricultural export base by subsidizing crops that typically have not been grown in the State. Such programs have recently become more popular.

Some States also have very narrowly targeted farm credit subsidies. Examples include low-interest loans to buy computer equipment and software, or to construct energy-efficient farm buildings.

Programs Remain A Contingent Liability

Many State programs are being phased down as the farm financial crisis eases. States wish to reduce programs that involve significant current budget expenditures (e.g., direct loans), or that expose the State to unknown future costs (e.g., loan guarantees and insurance).

But even if the programs were to end soon, a legacy of potential costs will remain from outstanding loan guarantees and insured loans for some time to come. *[Doug Duncan and Jim Mikesell (202) 786-1893]*

Resources

About 2.5 Million Acres Added to CRP

The eighth signup for the Conservation Reserve Program (CRP), held this February, brought an additional 2.46 million contracted acres into the 10-year cropland retirement program. This brings total CRP enrollment to 30.59 million acres, compared to the goal of 40-45 million for 1990.

The Northern Plains region now accounts for 26 percent of all CRP enrollment. Of the acres contracted in the eighth signup, 41 percent came from the Northern Plains, partly because of new rules making fields with cropped wetlands eligible. Of the 156,000 acres of cropped wetlands enrolled in the eighth signup, 96,000 came from the Dakotas.

Eligibility Expanded

Beginning with the eighth signup, program eligibility was expanded to include cropland showing substantial scour erosion, which is caused by water overflowing stream and riverbeds. A total of 63,600 acres was enrolled in this category, more than half from Iowa and Mississippi.

Fields placed in the CRP under the new eligibility conditions must be planted with trees unless the Soil Conservation Service specifically determines otherwise. The proportion of land planted with trees in the eighth signup rose to 8 percent.

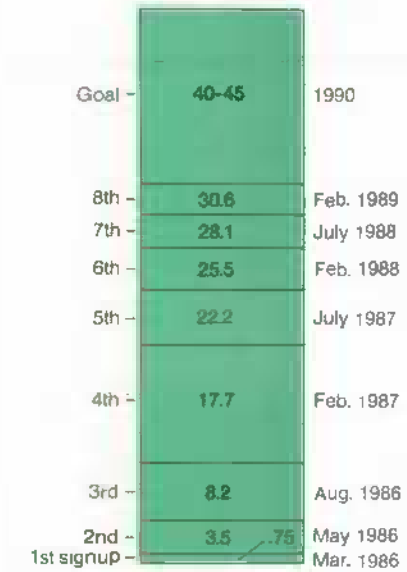
The share of land placed in wildlife uses rose to 14 percent. Land planted in grass slipped to 77 percent. Filter strip area in the eighth signup was 10,500 acres, bringing total filter strip enrollment to just over 40,000 acres.

For the Conservation Reserve as a whole, the share of land in trees is 6 percent and in wildlife 5 percent, while acres in grass account for 88 percent.

Average Rental Payment Up Again

The average annual rental payment rose to over $51 per acre, up from $42 for the first signup, held in 1986. The rise in the eighth signup did not result from increases in USDA maximum acceptable rental rates, which have not gone up since the sixth signup.

30.6 Million Acres Are in the Conservation Reserve



Instead, continuing shifts in regional enrollment to areas where farmland is relatively more productive, and CRP rental payments higher, explain the rise. Proportionately less Southern Plains and Mountain States land was enrolled, compared with earlier signups. Since these regions have lower bid caps than other areas, the average rental payment for the country has gone up.

For land enrolled in the eighth signup, the average erosion reduction fell to 14 tons per acre per year, from 25 to 27 tons obtained in the first three signups. The most erodible land was enrolled in earlier signups; also, program rules have expanded eligibility to include less erodible lands.

The ninth CRP signup was scheduled to begin on July 17, 1989; results will be available in early winter. *[Tim Osborn (202) 786-1434]*

Signup for the Conservation Reserve Program

Signup	Period	Contracts	Acres	Average rental rate	Average erosion reduction
		$1,000	Million	$/acre/yr.	Tons/acre/yr.
1	3/3/86 - 3/14/86	9.4	0.75	42.06	26
2	5/5/86 - 5/16/86	21.5	2.77	44.05	27
3	8/4/86 - 8/15/86	34.0	4.70	46.96	25
4	2/9/87 - 2/27/87	88.0	9.48	51.19	19
5	7/20/87 - 7/31-87	43.7	4.44	48.03	17
6	2/1/88 - 2/19/88	42.7	3.38	47.90	18
7	7/18/88 - 8/31/88	30.4	2.60	49.71	17
8	2/6/89 - 2/24/89	28.8	2.46	51.04	14
Aggregate		298.6	30.59	48.70	20

Source: USDA, Agricultural Stabilization and Conservation Service.

Special Article

Feed Industries Can Spur World Trade

As nations prosper, their consumers demand more meat. When the domestic meat market is small, imports supply this growing demand. As the domestic market grows, local entrepreneurs begin producing grain-fed chicken and pork in modern, factory-style units. Because meat is difficult and expensive to transport, local chicken and pork production can be profitable, even when the feed must be imported. Furthermore, because consumers usually prefer fresh meat, it often sells for a premium over imported, frozen meat.

The technologies behind confinement livestock units and feed manufacturing facilities, though costly, are readily transferred from other countries. As a result, many marketing opportunities arise for U.S. agribusiness exporters when livestock/feed sectors expand in developing countries.

How this technology transfer affects trade in meat, grains, and protein supplements varies with the agricultural resources of the importing country. If the country lacks cropland, higher domestic meat production increases the demand for imported feed ingredients. This has been the most common situation.

However, a few countries, such as Thailand and Brazil, have abundant land and proper climate for growing crops to feed to livestock. Their feed manufacturers and livestock producers can add value to surplus domestic crops by raising livestock for domestic use or, if there is a surplus, exporting the meat. But then the extra grain supply is not available for export.

Feed Manufacturing A Vital Link

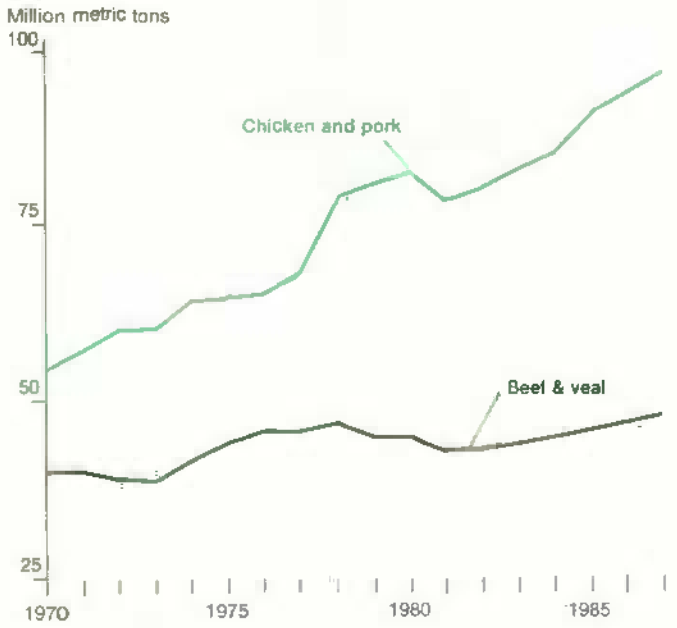
The mixed feed industry grew out of food processing firms' need to find some use for their byproducts. Major byproducts include wheat and corn bran and gluten from mills; grains and solubles from distilleries; and blood meal, meat meal, and bone meal from slaughterhouses. Such byproducts would have little value if they were not sold as feed; if they were discarded, disposal costs would significantly increase the price of the principal consumer products.

Before the feed industry developed in the U.S., byproducts were commonly dumped into nearby rivers, causing considerable pollution. Nutritionists then determined that the byproducts were high in protein, and that absence of protein in rations was limiting livestock growth. The need to process and mix these byproducts with feed grains created the feed industry. This industry has grown in the U.S. from a few firms mixing grain and processing byproducts in the 1890's to a major manufacturing industry.

In the 1950's, feeding costs dropped when manufacturers began to substitute relatively cheap soybean meal for expensive animal proteins and fishmeal as the primary protein supplement. Protein supplements are needed in commercial chicken and swine grain rations to supply essential amino acids.

Essential amino acids are those which the animal body cannot synthesize for itself, and which must be supplied directly in the diet. For example, corn is deficient in the acid types arginine and lysine. Fishmeal has a good balance of essential amino acids, but is expensive. Soybean meal is cheaper than fishmeal, but is deficient in other amino acids such as methionine and cystine. A balanced, economical, and efficient ration can be formulated by mixing these and other ingredients.

World Production of Chicken & Pork For Outpaces Beef & Veal



Slightly more than half of all feed manufactured in the U.S. is poultry feed. Poultry feeds are manufactured by units within the vertically integrated firms of the poultry industry, not by a separate enterprise as is common for the rest of the livestock sector. Swine feed amounts to less than one fifth of all production, and cattle feeds make up little over a quarter. While most poultry feed is complete feed, more than two thirds of the swine feeds are concentrates. Cattle feeds are almost always concentrates.

Growing Meat Demand Spurs Technology Transfer

As entrepreneurs in the more prosperous Third World countries watched their countries become dependent on chicken meat imports during the 1970's, they saw opportunities to produce broilers locally. Local broiler production began growing rapidly with the transfer of integrated broiler production and feed manufacturing technology from the U.S. and Western Europe.

In the Middle East, oil income raised demand for chicken meat. At first, domestic broiler production was slow to expand. But in the early 1980's, entrepreneurs investing oil earnings in modern feed manufacturing and broiler facilities had increased domestic chicken meat production enough to begin moving their countries back toward self-sufficiency. As broiler production expanded, Middle Eastern imports of feed ingredients increased rapidly. Governments sometimes subsidized the cost of these ingredients to their broiler industries.

In the Far East, income from the export of manufactured goods boosted demand for poultry products. Domestic feed manufacturing and broiler production expanded using imported technology. Because these countries lack cropland, the feed for their expanding broiler industries is imported.

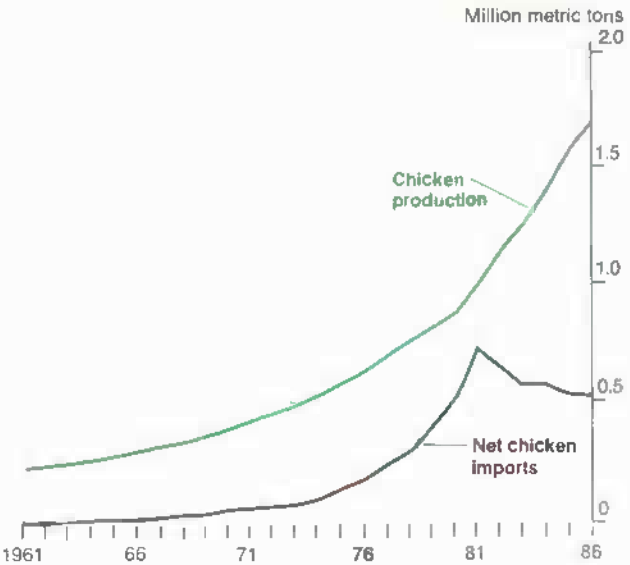
The transfer of feed manufacturing and integrated broiler production technology frees countries of crop production limits such as poor climate and lack of water in the Middle East, or lack of land in the Far East. There are limits, however, when land is very scarce, as in Singapore. In urban areas, environmental concerns over waste limit production growth.

As the major chicken-importing nations in the Third World acquired broiler (and swine) production technology, their reliance on grain imports rose. These developing countries have shifted from exporting 10 percent of their corn and sorghum production in the mid-1960's to importing 15 percent of total use today. This shift occurred even as their corn and sorghum production increased 2.8 percent annually.

EC and U.S. Fought "Chicken War"

A similar developmental cycle unwound in Western Europe after World War II. U.S. poultry meat exports to West Germany rose rapidly in the late 1950's and early 1960's as Germany recovered from the war. The U.S. sent 4.5 million pounds in 1956 under P.L. 480, the Food for Peace Program. By 1961, U.S. poultry meat exports to West Germany

As Third World's Chicken Imports* Rose, Transferred Technology Let Domestic Output Soar



*Chicken imports of 8 largest chicken-importing countries of the Third World.

reached 140 million pounds, all paid for in U.S. dollars. West Germany's per capita consumption of poultry meat rose from 4.4 pounds per year to 12.5.

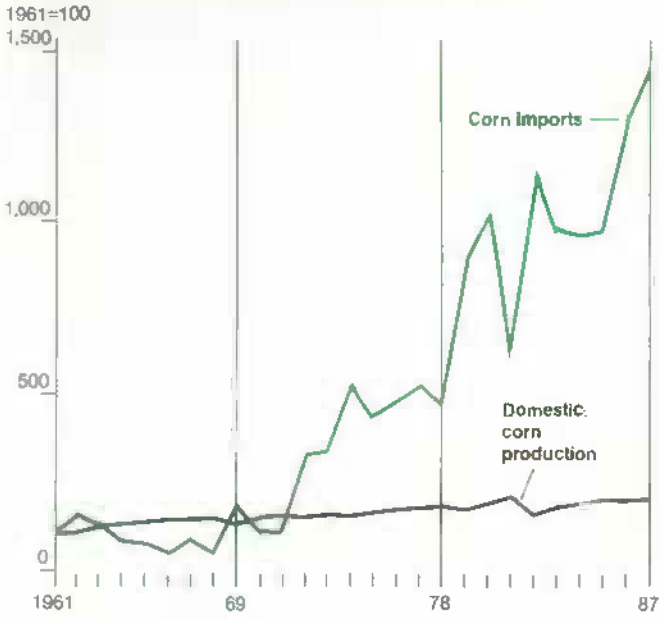
By then, however, broiler production was increasing rapidly elsewhere in the newly formed European Community (EC), in part through the arrival of U.S. technology. U.S. firms were exporting breeding stock, feed, equipment, and other items. Much of the technology came initially from research that had given the U.S. poultry industry an early trade advantage.

Because the goals of the EC include fostering trade among member nations, its Common Agricultural Policy (CAP) supported substituting poultry meat from member countries for U.S. exports. This led to the "Chicken War" between the U.S. and EC during the early 1960's. It was the first major incident in the now longstanding dispute between the U.S. and the EC about the international consequences of CAP.

U.S. broiler producers lost a market in West Germany, but U.S. grain and soybean farmers gained new markets; total EC demand for feed ingredients increased faster than production.

Broiler production continued to increase in the EC, outpacing consumption. By 1969, the EC was a net exporter of broiler meat, and now it is the world's leading exporter. At the same time, however, the CAP encouraged EC grain production in order to replace the grain imports supplying the EC feed manufacturing industry.

As Chicken-Importing Countries Start Their Own Feed-Manufacturing Operations, Corn Imports Soar



Japan Follows Early EC Pattern

Japan's story is different because agricultural land is more scarce. Transfer of broiler production and feed manufacturing technology began in the late 1950's. Per capita consumption rose from .4 pounds in 1960 to 28 pounds in 1987, outpacing local production.

As Japan became increasingly dependent on imports of chicken meat, imports of feed ingredients were growing to supply local entrepreneurs' broiler operations and feed manufacturing. Because Japan has little land for growing feed grains, the Japanese feed industry relies on imported grain (90 percent of use) and protein supplements.

Brazil and Thailand Become Chicken Exporters

Brazil and Thailand are now significant chicken-meat exporters. Their exports are based on modern broiler production technology and a feed industry supplied by locally grown feedstuffs. Their broiler meat exports were more than 95 percent of the Third World total in the mid-1980's. Brazil alone accounted for 85 percent of Third World exports.

Brazil began modernizing its poultry industry with imported technology in 1967. The country was responding to world market opportunities, its own huge land and labor resources to grow feed ingredients, and government policy to boost economic development and employment. By 1974, Brazil was exporting broiler meat. Exports rose to 20 percent of production by the early 1980's. They have fallen off recently, though, and fluctuate depending on markets in the Middle East and competition from EC and U.S. export subsidies.

Responding to similar signals, Thailand began modernizing its broiler and feed industries in 1970. Broiler production quickly outpaced consumption and Thailand began exporting in 1973, sometimes in competition with the U.S. Ninety percent of Thai exports are deboned chicken to Japan.

Chicken and Pork Gaining on Beef

The rapid geographic transfer of poultry, swine, and feed technology underlies a worldwide trend toward growing dependence on these animals for meat. The cost savings of production technologies have greatly lowered these meats' consumer prices relative to local beef and lamb.

The U.S. share of world chicken meat trade has declined from 31 percent in the early 1960's, before U.S. agribusiness began exporting its broiler technology, to 17 percent, but U.S. grain exports have climbed.

The U.S. broiler advantage declined because the technology was not dependent on climate and land, as are so many other agricultural technologies. As time passed, technology transfer linked livestock production and feed manufacturing into a global trading economy, from intermediate inputs through to the final product.

Unlike chickens and hogs, ruminant livestock (cattle, sheep, and goats) rely in most countries on grass and other roughages. Because approximately two-thirds of the world's agricultural land is pasture, ruminants will always play a major role in the world's food supply. About 60 percent of pasture land is not suitable for growing grains. If it were cropped, there would be excessive soil erosion, desertification, and other problems. Without ruminants, these lands could contribute little to world food supplies.

Forage Most Important for Ruminants; Grains and Byproducts for Pigs and Chickens

Animal	National grouping	Components: Grain	Protein	By-products	Forage and other sources
		Percent by metabolized calories			
RUMINANTS					
Cattle & buffalo	Developing	2	0	2	96
	Developed	19	2	4	75
	Centrally planned	20	1	4	75
Sheep & goats	Developing	0	0	2	98
	Developed	4	1	3	92
	Centrally planned	4	1	7	88
NONRUMINANTS					
Swine	Developing	20	3	26	51
	Developed	78	11	11	0
	Centrally planned	41	3	34	22
Poultry	Developing	59	13	20	8
	Developed	70	22	8	0
	Centrally planned	61	9	12	18

Source: "Agriculture's Changing Role in International Trade and Aid" by William I. Jones. World Bank Reprint Series: No. 323, 1984.

Feed Use of Grains Is Increasing

A meat-based diet requires much more grain than a subsistence grain diet. In developed countries over two-thirds of grain is used for animal feed. A meat-based diet takes 1,500 to 2,000 pounds of grain per person per year. Among higher income developing countries, about one-quarter of the grain is fed to livestock. In contrast, low-income developing countries use less than 2 percent of their grain for livestock. A subsistence grain diet in a poor country may use only 400 to 500 pounds of grain per person per year.

As more and more people are able to afford animal products in their diet, the proportion of the world's grain fed to livestock has increased, rising by 15 percent since the early 1960's. On average, more than 625 million tons of grain—almost 40 percent of world production—and 60 million tons of soybean meal were fed to livestock annually over the past 3 years.

Feed Industry Is Key To Agricultural Development

A modern feed industry seeks efficient use of the grains and oilseeds fed to livestock. In addition, by recycling byproducts, which might otherwise be pollutants, a feed industry helps conserve grain and protein supplements that are often imported with scarce foreign exchange.

The establishment of a feed industry in a developing country is also a critical link for exporters of feed manufacturing equipment. The required investment is substantial and varies with plant design. For example, pelleting the feed to improve handling and feed conversion raises the equipment investment an estimated 17 percent. If the feed is bagged rather than handled in bulk, estimated equipment investment rises 10 percent.

Centrally Planned Economies Are A Potentially Large Market

The situation in the People's Republic of China is similar to that of many developing countries. As incomes rise, much of the increase is spent to improve diets. Demand for feedstuffs can easily outstrip production, and transportation problems can cause local shortages.

Rising animal-product consumption in the USSR and Eastern Europe requires a large livestock sector whose feed ingredients are partly imported. According to the U.S. Feed Grains Council, however, the Soviet feed industry is badly outdated in technology and practices, making it difficult to increase production to meet demand. Should political developments warrant and foreign exchange become available, the centrally planned economies represent large potential markets for feed-industry technologies. *[Gary Vocke (202) 786-1717]*

Byproducts Are Critical Feed Ingredients in the U.S.

	Million tons 1/
Grains, including corn, sorghum, barley, oats, and wheat 2/	141
Oilseed meals, including soybean and cottonseed meal	20
Grain byproducts, including brewer's grains, distiller's grains, corn gluten meal, hominy feed, wheat millfeeds, and soybean millfeeds	12
Animal proteins, including meat meal tankage, meat and bone meal, fish meal, poultry byproduct meal, feather meal, and dried milk products	5
Other ingredients: fats, molasses, sugar, dehydrated alfalfa, sun-cured alfalfa, liquid whey, urea, beet pulp, and citrus pulp	6
Minerals, including calcium, phosphorus, salt, and trace minerals	5
Vitamins, drugs, flavors, other micro ingredients, and premixes	1
Total	190

1/ Grains and byproducts fed in 1984. 2/ Includes grain in complete feeds and grain mixed with concentrates and premixes on the farm.

Source: Unpublished USDA data and The U.S. Feed Manufacturing Industry, 1984, by Ash, Lin, and Johnson; Statistical Bulletin 768, ERS, USDA, 1988.

Complete Feeds, Concentrates, and Premixes

Feeds are classed as complete, concentrates, or premixes. Complete feeds are balanced rations in themselves, containing high levels of grain. Concentrates are feeds in which the grain has not yet been included; it is usually added at the farm. Premixes contain only minerals, vitamins, and other trace elements. Both grain and protein, usually soybean meal, must be added to the premix.

Statistical Indicators

Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1988				1989				
	II	III	IV	Annual	I	II	III F	IV F	Annual F
Prices received by farmers (1977=100)	133	142	144	138	149	141	137	--	140
Livestock & products	148	151	152	150	159	154	151	--	154
Crops	117	133	135	126	138	135	134	--	133
Prices paid by farmers, (1977=100)									
Production items	155	159	162	157	163	162	--	--	168
Commodities & services, interest, taxes, & wages	168	172	173	170	175	177	--	--	180
Cash receipts ($ bil.) 1/	157	168	135	150	159	159	167	--	156-163
Livestock ($ bil.)	75	83	78	78	81	81	83	--	79-82
Crops ($ bil.)	82	85	57	72	78	78	84	--	72-76
Market basket (1982-84=100)									
Retail cost	115	118	118	116	123	125	--	--	--
Farm value	99	104	100	100	107	108	--	--	--
Spread	123	126	128	124	131	133	--	--	--
Farm value/retail cost (%)	30	30	30	30	30	30	--	--	--
Retail prices (1982-84=100)									
Food	117	119	120	118	123	125	125	--	--
At home	115	118	119	117	122	124	124	--	--
Away from home	121	123	123	122	125	127	128	--	--
Agricultural exports ($ bil.) 2/	8.7	8.7	10.3	35.3	10.9	9.5	8.3	9.5	39.0
Agricultural imports ($ bil.) 2/	5.0	5.1	5.2	21.0	5.5	5.1	5.2	5.2	21.0
Commercial production									
Red meat (mil. lb.)	9,683	10,139	10,269	39,763	9,594	9,866	9,945	9,978	39,383
Poultry (mil. lb.)	5,209	5,213	5,180	20,587	5,070	5,490	5,625	5,570	21,755
Eggs (mil. doz.)	1,428	1,421	1,446	5,771	1,391	1,395	1,405	1,460	5,651
Milk (bil. lb.)	37.9	36.0	35.4	145.5	36.6	38.4	36.6	35.9	147.5
Consumption, per capita									
Red meat and poultry (lb.)	54.2	54.8	56.3	218.9	52.6	54.7	55.6	57.0	219.8
Corn beginning stocks (mil. bu.) 3/	7,635.2	5,835.5	4,259.1	4,881.7	7,071.6	5,203.9	3,419.0	--	4,259.1
Corn use (mil. bu.) 3/	1,801.3	1,576.9	2,109.4	7,698.7	1,868.5	1,787.0	--	--	--
Prices 4/									
Choice steers--Omaha ($/cwt)	72.81	66.92	70.14	69.54	73.85	73.85	69-73	70-76	71-74
Barrows & gilts--7 mkts. ($/cwt)	45.90	44.24	38.66	43.39	40.78	41.84	43-47	36-42	40-43
Broilers--12-city (cts./lb.)	55.6	66.1	57.9	56.3	59.4	67.1	63-67	51-57	60-63
Eggs--NY Gr. A large (cts./doz.)	53.3	72.9	67.3	62.1	78.6	74.5	73-77	69-75	73-76
Milk--all at plant ($/cwt)	11.43	11.87	13.26	12.22	13.07	12.20	12.20-12.60	12.75-13.55	12.55-12.85
Wheat--Kansas City HRW ($/bu.)	3.38	3.86	4.11	3.64	4.36	4.44	--	--	--
Corn--Chicago ($/bu.)	2.29	2.84	2.75	2.46	2.75	2.76	--	--	--
Soybeans--Chicago ($/bu.)	7.01	8.38	7.91	7.36	7.59	7.39	--	--	--
Cotton--Avg. spot mkt. (cts./lb.)	61.5	58.5	52.3	57.8	56.1	60.9	--	--	--

	1981	1982	1983	1984	1985	1986	1987	1988	1989 F
Gross cash income ($ bil.)	146.0	150.6	150.4	155.2	156.7	152.0	160.5	170	168-173
Gross cash expenses ($ bil.)	113.2	112.8	113.5	116.6	110.2	100.6	103.3	113	115-119
Net cash income ($ bil.)	32.8	37.8	36.9	38.7	46.6	51.4	57.1	58	50-55
Net farm income ($ bil.)	26.9	23.5	12.7	32.3	32.2	37.4	46.3	44	47-52
Farm real estate values 5/									
Nominal	819	823	788	782	679	595	547	564	597
Real (1977 dols.)	551	513	472	448	376	322	290	288	291

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated.

3/ Dec.-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; Sept.-Aug. annual. Use includes exports & domestic disappearance. 4/ Simple averages. 5/ 1981 & 1986-89 values as of February 1. 1982-85 values as of April 1.
F = forecast. -- = not available.

Table 2.—U.S. Gross National Product & Related Data

	Annual			1988				1989
	1986	1987	1988	I	II	III	IV	I R
	$ billion (quarterly data seasonally adjusted at annual rates)							
Gross national product	4,240.3	4,526.7	4,864.3	4,724.5	4,823.8	4,909.0	4,999.7	5,099.0
Personal consumption expenditures	2,807.5	3,012.1	3,227.5	3,128.1	3,194.6	3,261.2	3,326.4	3,378.1
Durable goods	406.5	421.9	451.1	437.8	449.8	452.9	464.0	459.9
Nondurable goods	943.6	997.9	1,046.9	1,016.2	1,036.6	1,060.8	1,073.9	1,092.7
Clothing & shoes	167.0	178.2	186.4	180.5	183.2	188.4	193.6	194.0
Food & beverages	501.0	526.4	551.5	535.9	546.3	558.9	564.9	577.9
Services	1,457.3	1,592.3	1,729.6	1,674.1	1,708.2	1,747.5	1,788.5	1,825.5
Gross private domestic investment	665.9	712.9	766.5	763.4	758.1	772.5	772.0	788.9
Fixed investment	650.4	673.7	718.1	698.1	714.4	722.8	737.2	748.5
Change in business inventories	15.5	39.2	48.4	65.3	43.7	49.7	34.7	40.4
Net exports of goods & services	-104.4	-123.0	-94.6	-112.1	-90.4	-80.0	-96.1	-79.3
Government purchases of goods & services	871.2	924.7	964.9	945.2	961.6	955.3	997.5	1,011.3
	1982 $ billion (quarterly data seasonally adjusted at annual rates)							
Gross national product	3,721.7	3,847.0	3,996.1	3,956.1	3,985.2	4,009.4	4,033.4	4,077.5
Personal consumption expenditures	2,455.2	2,521.0	2,592.2	2,559.8	2,579.0	2,603.8	2,626.2	2,634.9
Durable goods	385.0	390.9	409.7	401.1	410.6	410.4	416.5	412.3
Nondurable goods	879.5	890.5	899.6	892.7	893.6	904.5	907.4	911.5
Clothing & shoes	157.6	160.5	161.1	159.6	156.3	164.2	164.1	164.5
Food & beverages	448.0	450.4	453.3	451.4	453.2	453.8	454.8	459.3
Services	1,190.7	1,239.5	1,283.0	1,265.9	1,274.8	1,288.9	1,302.2	1,311.1
Gross private domestic investment	643.5	674.8	721.8	728.9	715.1	726.1	717.1	730.2
Fixed investment	628.1	640.4	679.3	662.9	679.7	686.6	688.0	694.8
Change in business inventories	15.4	34.4	42.5	66.0	35.3	39.5	29.1	35.5
Net exports of goods & services	-137.5	-128.9	-100.2	-109.0	-92.6	-93.9	-105.4	-85.9
Government purchases of goods & services	760.5	780.2	782.3	776.4	783.8	773.5	795.5	798.2
GNP implicit price deflator (% change)	2.7	3.3	3.4	1.7	5.5	4.7	5.3	3.6
Disposable personal income ($ bil.)	3,019.6	3,209.7	3,471.8	3,375.6	3,421.5	3,507.5	3,582.5	3,680.6
Disposable per. income (1982 $ bil.)	2,640.9	2,686.3	2,788.3	2,762.3	2,762.2	2,800.4	2,828.4	2,870.8
Per capita disposable per. income ($)	12,496	13,157	14,103	13,760	13,919	14,231	14,497	14,861
Per capita dis. per. income (1982 $)	10,929	11,012	11,326	11,260	11,237	11,362	11,445	11,592
U.S. population, total, incl. military abroad (mil.)	241.6	243.9	246.3	245.5	246.0	246.7	247.3	247.9
Civilian population (mil.)	239.4	241.7	244.1	243.2	243.8	244.5	245.1	245.7

	Annual			1988	1989			
	1986	1987	1988	May	Feb	Mar	Apr	May P
	Monthly data seasonally adjusted							
Industrial production (1977=100)	125.1	129.8	137.2	136.1	140.5	140.6	141.4	141.4
Leading economic indicators (1982=100)	132.1	139.6	142.5	141.5	145.4	144.6	145.5	143.8
Civilian employment (mil. persons)	109.6	112.4	115.0	114.4	116.9	117.1	117.1	117.2
Civilian unemployment rate (%)	7.0	6.2	5.5	5.6	5.1	5.0	5.3	5.2
Personal income ($ bil. annual rate)	3,531.1	3,780.0	4,062.1	4,021.4	4,318.2	4,355.7	4,376.7	4,389.7
Money stock-M2 (daily avg.) ($ bil.) 1/	2,811.2	2,909.9	3,069.4	2,999.8	3,069.2	3,078.7	3,081.3	3,072.8
Three-month Treasury bill rate (%)	5.98	5.82	6.69	6.27	8.48	8.83	8.70	8.40
AAA corporate bond yield (Moody's) (%)	9.02	9.38	9.71	9.90	9.64	9.80	9.79	9.57
Housing starts (1,000) 2/	1,805	1,621	1,488	1,392	1,465	1,409	1,339	1,311
Auto sales at retail, total (mil.)	11.4	10.3	10.6	10.4	9.9	9.5	10.8	10.1
Business inventory/sales ratio	1.55	1.50	1.51	1.50	1.50	1.51	1.49	--
Sales of all retail stores ($ bil.)	121.2	125.5	134.4	134.0	139.4	139.5	140.9 P	141.1
Nondurable goods stores ($ bil.)	73.9	76.9	83.6	82.1	86.4	86.6	87.1 P	87.1
Food stores ($ bil.)	24.6	25.3	27.6	27.4	29.0	29.0	29.3 P	29.4
Eating & drinking places ($ bil.)	12.1	12.7	13.1	12.8	13.7	13.6	13.3 P	13.3
Apparel & accessory stores ($ bil.)	6.7	7.1	7.0	6.6	7.0	7.0	7.2 P	7.1

1/ Annual data as of December of the year listed. 2/ Private, including farm. R = revised. P = preliminary. -- = not available.

Information contact: James Malley (202) 786-1782.

Table 3.—Foreign Economic Growth, Inflation, & Export Earnings

	Average 1975-79	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989 P	1990 F
	Annual percent change											
Total foreign												
Real GNP	3.7	2.6	1.6	1.7	2.0	3.2	3.0	2.2	3.1	4.0	3.1	3.1
CPI	14.0	17.1	15.8	14.7	18.8	22.8	22.1	11.8	16.6	34.4	69.4	57.5
Export earnings	14.6	22.2	-2.7	-7.0	-2.6	5.6	1.9	11.0	18.5	13.5	9.8	9.3
Developed less U.S.												
Real GNP	3.1	2.4	1.4	1.1	1.9	3.4	3.3	2.4	3.1	4.0	3.1	2.6
CPI	9.4	10.9	9.6	8.0	6.0	5.1	4.7	2.8	2.6	2.9	4.0	3.4
Export earnings	14.9	17.0	-3.3	-4.3	-0.5	6.3	4.6	19.4	17.6	12.5	11.0	9.1
Centrally planned												
Real GNP	3.5	1.5	2.1	2.7	2.7	1.9	1.3	3.2	1.4	3.3	2.5	2.6
Export earnings	16.1	16.5	3.4	6.0	8.2	1.5	-5.1	7.3	6.7	5.2	5.6	8.1
Latin America												
Real GNP	5.1	5.4	0.9	-0.5	-3.2	3.5	3.7	4.1	3.0	0.2	-1.3	3.3
CPI	53.7	64.0	67.9	75.1	130.0	177.9	184.9	88.9	140.5	318.0	686.2	570.0
Export earnings	12.8	30.1	5.3	-10.1	-0.8	6.7	-7.3	-14.2	8.9	16.4	3.0	1.2
Africa & Middle East												
Real GNP	6.4	1.3	0.0	1.4	0.1	1.1	0.0	-1.2	1.4	3.5	2.2	3.4
CPI	16.4	24.6	17.3	12.9	16.7	19.4	11.2	11.7	13.5	24.2	21.9	15.4
Export earnings	13.2	37.9	-9.2	-19.7	-17.5	-6.1	-4.6	-20.8	23.7	3.9	4.3	4.8
Asia												
Real GNP	6.8	6.3	6.6	3.6	6.6	5.4	4.0	5.8	6.7	8.2	6.6	5.6
CPI	8.4	16.4	14.1	7.3	7.7	8.5	5.2	4.5	5.4	6.8	7.3	7.7
Export earnings	18.6	27.8	6.8	-0.3	3.4	13.1	-0.8	6.0	28.1	25.8	12.4	11.5

P = preliminary. F = forecast.

Information contact: Timothy Baxter (202) 786-1706.

Farm Prices

Table 4.—Indexes of Prices Received & Paid by Farmers, U.S. Average

	Annual			1988	1989					
	1986	1987	1988	June	Jan	Feb	Mar	Apr	May R	June P
	1977=100									
Prices received										
All farm products	123	126	138	139	149	148	149	147	149	146
All crops	107	106	126	129	140	138	136	140	141	137
Food grains	109	103	137	139	160	161	162	161	160	152
Feed grains & hay	98	85	120	127	137	137	138	139	138	130
Feed grains	96	81	117	125	133	132	132	131	130	123
Cotton	91	99	95	103	89	88	93	97	97	98
Tobacco	138	129	132	126	145	143	143	144	144	144
Oil-bearing crops	77	79	108	120	116	112	112	110	109	106
Fruit, all	169	181	181	188	177	176	158	166	201	197
Fresh market 1/	177	194	194	203	190	188	166	176	216	212
Commercial vegetables	130	144	142	120	179	167	149	171	153	154
Fresh market	123	147	137	109	185	163	146	168	145	152
Potatoes & dry beans	114	126	124	115	163	171	194	208	223	213
Livestock & products	138	146	150	147	158	158	161	154	156	155
Meat animals	145	163	168	168	174	176	176	170	171	171
Dairy products	129	129	126	116	138	135	131	127	126	125
Poultry & eggs	128	107	118	116	129	128	150	139	147	144
Prices paid										
Commodities & services, interest, taxes, & wage rates	159	161	170	--	175	--	--	177	--	--
Production items	144	147	157	--	163	--	--	165	--	--
Feed	108	103	128	--	141	--	--	140	--	--
Feeder livestock	153	179	192	--	202	--	--	185	--	--
Seed	148	148	150	--	150	--	--	170	--	--
Fertilizer	124	118	130	--	133	--	--	141	--	--
Agricultural chemicals	127	124	126	--	128	--	--	133	--	--
Fuels & energy	162	161	163	--	166	--	--	185	--	--
Farm & motor supplies	144	145	148	--	153	--	--	155	--	--
Autos & trucks	198	208	215	--	216	--	--	226	--	--
Tractors & self-propelled machinery	174	174	181	--	188	--	--	192	--	--
Other machinery	182	185	197	--	203	--	--	209	--	--
Building & fencing	136	137	138	--	139	--	--	140	--	--
Farm services & cash rent	145	146	147	--	151	--	--	151	--	--
Interest payable per acre on farm real estate debt	211	190	186	--	190	--	--	190	--	--
Taxes payable per acre on farm real estate	138	139	142	--	187	--	--	144	--	--
Wage rates (seasonally adjusted)	160	167	172	--	187	--	--	187	--	--
Production items, interest, taxes, & wage rates	150	151	160	--	166	--	--	167	--	--
Ratio, prices received to prices paid (%)2/	77	79	82	83	85	85	85	83	84	82
Prices received (1910-14=100)	561	578	631	633	682	677	679	672	680	668
Prices paid, etc. (parity index) (1910-14=100)	1,093	1,110	1,167	--	1,207	--	--	1,220	--	--
Parity ratio (1910-14=100) (%)2/	51	52	54	55	57	--	--	55	--	--

1/ Fresh market for noncitrus; fresh market & processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio derived using the most recent prices paid index. Prices paid data are quarterly and will be published in January, April, July, and October. P = preliminary. R = revised. -- = not available.

Information contact: National Agricultural Statistics Service (202) 447-5446.

Table 5.—Prices Received by Farmers, U.S. Average

	Annual 1/			1988	1989					
	1986	1987	1988	June	Jan	Feb	Mar	Apr	May R	June P
Crops										
All wheat ($/bu.)	2.71	2.55	3.33	3.37	4.01	4.03	4.07	4.03	4.01	3.78
Rice, rough ($/cwt)	5.04	4.59	7.79	7.69	6.47	6.59	6.47	6.66	6.76	6.85
Corn ($/bu.)	1.96	1.56	2.27	2.41	2.60	2.58	2.59	2.56	2.58	2.46
Sorghum ($/cwt)	3.11	2.56	3.66	4.13	4.09	4.05	4.03	4.16	4.02	3.98
All hay, baled ($/ton)	61.60	62.40	78.30	77.40	91.20	93.70	98.10	104.00	104.00	94.80
Soybeans ($/bu.)	5.00	5.08	7.21	8.18	7.69	7.41	7.51	7.29	7.21	7.00
Cotton, upland (cts./lb.)	54.8	59.6	57.2	62.0	53.9	52.9	56.3	58.9	58.8	59.1
Potatoes ($/cwt)	5.03	4.35	5.49	4.26	6.13	6.42	7.45	8.15	8.94	8.44
Lettuce ($/cwt)	11.90	14.70	15.20	10.70	18.50	12.60	13.60	9.07	7.48	15.50
Tomatoes ($/cwt)	25.10	26.00	26.80	23.20	43.40	45.20	34.10	55.80	43.60	29.60
Onions ($/cwt)	10.90	12.50	9.99	8.52	12.30	10.80	9.70	10.90	9.58	10.70
Dry edible beans ($/cwt)	19.10	17.67	22.38	21.80	29.60	31.30	33.00	32.80	32.00	32.80
Apples for fresh use (cts./lb.)	19.8	17.6	16.7	10.4	17.9	18.1	16.1	14.6	14.1	10.8
Pears for fresh use ($/ton)	369.00	227.00	347.00	527.00	286.00	292.00	328.00	290.00	448.00	493.00
Oranges, all uses ($/box) 2/	4.27	5.03	6.56	8.42	6.20	6.21	5.27	6.64	8.52	8.10
Grapefruit, all uses ($/box) 2/	4.29	4.96	5.39	3.36	3.72	3.34	3.36	3.28	4.05	4.85
Livestock										
Beef cattle ($/cwt)	52.80	61.40	66.80	65.00	70.60	71.50	72.00	70.00	68.80	67.60
Calves ($/cwt)	60.90	78.10	89.80	84.90	92.80	95.90	94.00	90.50	91.20	92.70
Hogs ($/cwt)	50.10	50.80	42.50	47.10	40.90	40.40	39.30	36.90	41.60	44.20
Lambs ($/cwt)	69.10	77.90	69.50	60.20	67.40	68.40	72.50	75.20	73.10	69.80
All milk, sold to plants ($/cwt)	12.50	12.50	12.20	11.30	13.40	13.10	12.70	12.30	12.20	12.10
Milk, manuf. grade ($/cwt)	11.46	11.37	11.15	10.30	12.20	11.60	11.30	11.20	11.20	11.20
Broilers (cts./lb.)	34.5	28.8	34.0	37.4	35.3	35.2	38.7	38.9	45.2	42.6
Eggs (cts./doz.) 3/	61.2	53.1	53.2	46.3	63.9	62.1	80.1	65.3	62.0	63.3
Turkeys (cts./lb.)	44.4	34.3	36.5	32.1	35.4	38.3	40.0	42.3	43.4	44.0
Wool (cts./lb.) 4/	64.3	87.1	138.0	161.0	107.0	123.0	130.0	135.0	139.0	139.0

1/ Calendar year averages, except for potatoes, dry edible beans, apples, oranges, & grapefruit, which are crop years.
2/ Equivalent on-tree returns. 3/ Average of all eggs sold by producers including hatching eggs & eggs sold at retail.
4/ Average local market price, excluding incentive payments. P = preliminary. R = revised.

Information contact: National Agricultural Statistics Service (202) 447-5446.

Producer & Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1988				1989				
	1988	May	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
	1982-84=100									
Consumer Price Index, all items	118.3	117.5	120.2	120.3	120.5	121.1	121.6	122.3	123.1	123.8
Consumer Price Index, less food	118.3	117.6	120.2	120.3	120.4	120.8	121.3	122.0	122.9	123.5
All food	118.2	117.0	120.3	120.2	120.7	122.2	122.9	123.5	124.2	124.9
Food away from home	121.8	121.0	123.4	123.7	124.1	124.7	125.2	125.7	126.2	126.7
Food at home	116.6	115.1	119.0	118.7	119.1	121.2	122.0	122.7	123.5	124.4
Meats 1/	112.2	111.7	113.0	113.0	112.7	114.0	114.3	115.5	115.6	115.5
Beef & veal	112.1	111.7	113.7	114.7	114.6	116.0	116.6	119.0	119.0	119.6
Pork	112.5	111.7	111.8	110.0	109.6	111.5	110.9	111.0	111.2	110.1
Poultry	120.7	114.0	129.4	127.2	127.1	128.8	128.4	130.3	133.0	137.3
Fish	137.4	136.1	137.4	138.7	138.9	144.0	142.9	144.3	143.3	142.3
Eggs	93.6	81.8	105.5	101.2	99.6	112.0	106.1	122.9	117.6	112.6
Dairy products 2/	108.4	107.4	109.9	110.6	111.4	112.6	113.4	113.8	114.1	113.8
Fats & oils 3/	113.1	111.2	117.1	117.1	118.5	119.6	120.5	120.4	121.6	121.6
Fresh fruit	143.0	146.6	149.7	144.3	143.2	145.4	150.0	149.5	152.4	158.1
Processed fruit	122.0	121.8	124.3	125.0	124.4	125.6	125.5	124.7	124.6	125.1
Fresh vegetables	129.3	124.5	129.4	126.7	133.0	141.4	144.4	140.2	144.1	153.2
Potatoes	119.1	114.7	125.2	126.0	128.5	130.8	138.3	146.6	158.9	164.0
Processed vegetables	112.2	108.6	117.9	118.1	118.9	120.9	121.8	122.7	124.4	124.9
Cereals & bakery products	122.1	120.3	125.6	125.9	126.6	127.9	128.9	129.7	130.4	131.5
Sugar & sweets	114.0	112.5	116.0	115.9	116.7	117.2	117.8	118.0	117.9	118.1
Beverages, nonalcoholic	107.5	107.5	108.1	108.2	107.8	109.6	111.3	111.3	111.8	111.5
Apparel commodities less footwear	114.4	115.7	119.9	119.1	116.8	113.5	113.4	118.1	120.0	119.3
Footwear	109.9	109.7	115.9	114.5	113.5	112.2	112.7	114.1	115.3	114.9
Tobacco & smoking products	145.8	143.2	149.3	149.7	149.9	157.0	158.5	159.2	159.5	161.1
Beverages, alcoholic	118.6	118.2	119.8	119.9	119.9	120.3	121.1	121.8	122.3	123.1

1/ Beef, veal, lamb, pork, & processed meat. 2/ Includes butter. 3/ Excludes butter.

Information contact: Ralph Parlett (202) 786-1870.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1988		1989				
	1986	1987	1988	May	Dec	Jan R	Feb	Mar	Apr	May
					1982=100					
Finished goods 1/	103.2	105.4	108.0	107.5	110.0	111.1	111.7	112.2	113.0	114.2
Consumer foods	107.2	109.5	112.6	111.2	115.1	116.7	117.3	118.4	117.8	119.1
Fresh fruit	112.9	112.0	112.7	113.6	119.9	110.9	110.0	106.4	104.5	109.4
Fresh & dried vegetables	97.8	103.7	105.4	92.3	111.6	109.2	133.1	123.8	119.3	142.9
Dried fruit	91.9	95.0	99.1	99.3	100.8	101.1	101.1	103.0	102.9	102.3
Canned fruit & juice	111.0	115.3	120.1	119.9	122.4	122.5	120.7	122.1	122.0	122.0
Frozen fruit & juice	103.0	113.3	129.9	130.9	128.6	126.7	122.0	119.8	119.6	122.3
Fresh veg. excl. potatoes	99.3	99.0	100.4	88.5	96.7	93.4	119.9	111.0	107.1	140.4
Canned veg. & juices	101.2	103.5	108.3	103.2	117.3	118.7	119.7	120.3	119.4	119.7
Frozen vegetables	106.6	107.3	108.5	106.5	112.5	113.2	114.3	114.9	115.3	115.3
Potatoes	104.0	120.1	114.1	100.5	148.1	148.1	178.3	162.0	152.7	150.8
Eggs	99.5	87.6	88.6	70.8	100.3	127.3	96.7	135.8	110.8	107.0
Bakery products	116.6	118.4	126.4	124.5	130.6	132.0	133.2	133.0	133.7	134.4
Meats	93.9	100.4	99.9	102.2	99.0	102.8	102.4	103.7	103.2	103.5
Beef & veal	88.1	95.5	101.4	102.8	104.8	107.4	108.1	111.3	112.2	111.7
Pork	99.9	104.9	95.2	100.4	87.6	95.4	92.9	91.9	88.5	90.0
Processed poultry	116.7	103.4	111.4	105.6	115.3	116.3	115.0	123.9	125.1	132.2
Fish	124.9	140.0	151.7	150.8	151.8	151.6	161.8	161.4	158.3	157.5
Dairy products	99.9	101.6	102.2	100.1	106.2	107.1	106.8	106.3	105.5	105.7
Processed fruits & vegetables	104.9	108.6	113.8	111.7	118.5	119.0	119.1	119.4	119.1	119.9
Shortening & cooking oil	103.3	103.9	118.9	116.0	118.6	117.2	115.7	118.4	117.9	119.3
Consumer finished goods less foods	98.4	100.7	103.1	103.0	104.8	105.8	106.6	106.9	108.9	110.4
Beverages, alcoholic	110.1	110.3	111.9	111.6	112.0	112.2	114.0	115.0	115.5	116.5
Soft drinks	109.5	111.8	114.1	114.2	115.4	116.3	116.8	117.7	118.4	118.0
Apparel	106.3	108.3	111.7	111.0	113.1	113.7	114.0	113.8	114.0	114.2
Footwear	106.8	109.3	115.2	114.2	117.2	118.1	118.8	119.5	119.4	119.8
Tobacco products	142.4	154.6	171.9	166.8	184.7	187.2	187.7	187.4	187.4	187.4
Intermediate materials 2/	99.1	101.5	107.1	106.3	109.5	110.6	110.9	111.6	112.3	112.7
Materials for food manufacturing	98.4	100.8	105.9	104.0	108.3	110.4	109.8	111.4	111.5	112.4
Flour	94.5	92.9	105.7	97.2	113.2	114.8	114.3	116.1	113.7	115.9
Refined sugar 3/	103.2	106.4	108.6	106.6	113.7	115.8	114.4	116.1	116.1	117.0
Crude vegetable oils	84.8	84.2	116.8	114.1	108.4	108.9	103.1	109.9	107.4	114.7
Crude materials 4/	87.7	93.7	95.9	97.2	97.0	101.4	101.0	103.1	104.1	106.3
Foodstuffs & feedstuffs	93.2	96.2	106.0	104.7	109.5	112.5	111.0	113.7	111.4	115.0
Fruits & vegetables 5/	103.9	106.8	108.1	101.2	114.7	109.4	122.3	115.6	112.3	127.5
Grains	79.2	71.1	97.9	82.9	108.9	115.2	111.3	115.1	109.8	114.1
Livestock	91.8	102.0	103.0	111.8	101.0	104.5	104.1	106.2	105.9	106.9
Poultry, live	129.6	101.2	121.5	112.2	121.7	122.4	121.5	138.5	138.4	155.0
Fibers, plant & animal	88.3	106.4	98.4	103.7	93.9	95.8	94.8	98.4	105.0	108.1
Fluid milk	90.9	91.8	89.1	85.3	97.0	96.4	95.4	92.3	90.0	89.7
Oilseeds	91.4	99.2	134.0	127.5	137.5	143.6	133.2	140.0	130.7	137.5
Tobacco, leaf	89.7	85.7	87.2	82.0	94.4	94.4	94.4	93.1	93.1	93.7
Sugar, raw cane	104.9	110.2	111.9	111.8	112.0	111.0	111.9	112.3	112.3	113.8
All commodities	100.1	102.8	106.9	106.5	109.0	110.5	110.8	111.5	112.3	113.1
Industrial commodities	99.9	102.5	106.3	106.1	108.1	109.6	110.0	110.6	111.7	112.4
All foods 6/	105.5	107.8	111.5	110.0	114.1	115.7	116.3	117.5	116.8	118.4
Farm products & processed foods & feeds	101.2	103.7	110.0	108.1	112.9	115.0	114.6	116.2	115.1	116.9
Farm products	92.9	95.5	104.8	102.2	108.9	112.0	110.5	113.4	110.5	114.9
Processed foods & feeds 6/	105.4	107.9	112.8	111.2	115.0	116.6	116.8	117.8	117.5	118.1
Cereal & bakery products	111.0	112.6	122.9	120.4	126.5	128.2	129.4	129.1	129.3	130.8
Sugar & confectionery	109.6	112.6	114.6	113.1	117.3	117.8	118.1	118.7	120.0	119.6
Beverages	114.5	112.5	114.3	114.1	115.8	116.5	117.6	118.7	119.4	119.5

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types & sizes of refined sugar. 4/ Products entering market for the first time that have not been manufactured at that point. 5/ Fresh & dried. 6/ Includes all raw, intermediate, & processed foods (excludes soft drinks, alcoholic beverages, & manufactured animal feeds). R = revised.

Information contact: Bureau of Labor Statistics (202) 523-1913.

Table 8.—Farm-Retail Price Spreads

	Annual				1988		1989				
	1985	1986	1987	1988	May	Dec	Jan	Feb	Mar	Apr	May
Market basket 1/											
Retail cost (1982-84=100)	104.1	106.3	111.6	116.5	114.9	119.5	121.5	122.3	122.9	123.6	124.7
Farm value (1982-84=100)	96.2	94.9	97.1	100.3	98.2	102.9	105.6	106.4	107.1	106.6	108.4
Farm-retail spread (1982-84=100)	108.3	112.5	119.4	125.3	123.9	128.4	130.0	130.8	131.4	132.7	133.5
Farm value-retail cost (%)	32.4	31.2	30.5	30.1	29.9	30.2	30.5	30.5	30.5	30.2	30.4
Meat products											
Retail cost (1982-84=100)	98.9	102.0	109.6	112.2	111.7	112.7	114.0	114.3	115.5	115.6	115.6
Farm value (1982-84=100)	91.3	94.3	101.2	99.5	103.2	97.7	102.7	102.6	103.7	103.4	103.2
Farm-retail spread (1982-84=100)	106.7	109.8	118.3	125.2	120.4	128.1	125.6	126.3	127.6	128.1	128.3
Farm value-retail cost (%)	46.8	46.8	46.7	44.9	46.8	43.9	45.6	45.5	45.5	45.3	45.2
Dairy products											
Retail cost (1982-84=100)	103.2	103.3	105.9	108.4	107.4	111.4	112.6	113.4	113.8	114.1	113.8
Farm value (1982-84=100)	95.2	92.6	93.3	90.4	86.5	97.3	97.9	97.7	94.3	93.0	91.9
Farm-retail spread (1982-84=100)	110.5	113.3	117.5	124.9	126.7	124.4	126.1	127.9	131.7	133.5	134.0
Farm value-retail cost (%)	44.2	43.0	42.3	40.0	38.6	41.9	41.7	41.3	39.8	39.1	38.7
Poultry											
Retail cost (1982-84=100)	106.2	114.2	112.6	120.7	114.0	127.1	128.8	128.4	130.3	133.0	137.3
Farm value (1982-84=100)	105.9	115.1	93.8	110.4	105.2	114.4	112.8	113.9	124.3	125.9	143.5
Farm-retail spread (1982-84=100)	106.6	113.3	134.2	132.6	124.1	141.7	147.2	145.1	137.3	141.2	130.1
Farm value-retail cost (%)	53.3	53.9	44.6	49.0	49.4	48.2	46.9	47.5	51.0	50.7	55.9
Eggs											
Retail cost (1982-84=100)	91.0	97.2	91.5	93.6	81.8	99.6	112.0	106.1	122.9	117.6	112.6
Farm value (1982-84=100)	85.7	92.4	76.8	76.7	56.6	90.1	96.6	92.3	128.0	99.8	93.3
Farm-retail spread (1982-84=100)	100.4	106.0	117.9	123.9	127.1	116.7	139.7	130.9	113.7	149.5	147.2
Farm value-retail cost (%)	60.5	61.0	53.9	52.7	44.4	58.1	55.4	55.9	66.9	54.5	53.2
Cereal & bakery products											
Retail cost (1982-84=100)	107.9	110.9	114.8	122.1	120.3	126.6	127.9	128.9	129.7	130.4	131.5
Farm value (1982-84=100)	94.3	76.3	71.0	92.3	87.3	101.0	102.0	101.0	103.1	103.3	104.3
Farm-retail spread (1982-84=100)	109.8	115.7	120.9	126.3	124.9	130.2	131.5	132.8	133.4	134.2	135.3
Farm value-retail cost (%)	10.7	8.4	7.6	9.3	8.9	9.8	9.8	9.6	9.7	9.7	9.7
Fresh fruits											
Retail cost (1982-84=100)	118.4	120.4	135.6	145.4	149.8	147.0	150.1	154.3	151.6	151.0	157.3
Farm value (1982-84=100)	110.8	103.8	113.9	113.3	121.2	110.3	105.0	101.5	92.3	82.8	94.9
Farm-retail spread (1982-84=100)	121.8	128.0	145.7	160.2	163.0	164.0	170.9	178.7	179.0	182.5	186.1
Farm value-retail cost (%)	29.6	27.4	26.5	24.6	25.5	23.7	22.1	20.8	19.2	17.3	19.1
Fresh vegetables											
Retail costs (1982-84=100)	103.5	107.7	121.6	129.3	124.5	133.0	141.4	144.4	140.2	144.1	153.2
Farm value (1982-84=100)	93.1	90.0	112.0	105.8	90.6	108.5	120.4	144.5	120.1	142.7	148.6
Farm-retail spread (1982-84=100)	108.9	116.8	126.5	141.3	141.9	145.6	152.2	144.3	150.5	144.8	155.6
Farm value-retail cost (%)	30.5	28.4	31.3	27.8	24.7	27.7	28.9	34.0	29.1	33.6	32.9
Processed fruits & vegetables											
Retail cost (1982-84=100)	107.0	105.3	109.0	117.6	115.9	121.9	123.4	123.7	123.7	124.3	124.9
Farm value (1982-84=100)	117.7	101.5	111.1	136.5	133.9	136.8	137.5	134.4	133.5	131.9	132.0
Farm-retail spread (1982-84=100)	103.7	106.4	108.3	111.7	110.3	117.3	119.0	120.3	120.7	121.9	122.0
Farm value-retail costs (%)	26.2	22.9	24.2	27.6	27.5	26.7	26.5	25.8	25.7	25.2	25.1
Fats & oils											
Retail cost (1982-84=100)	108.9	106.5	108.1	113.1	111.2	118.5	119.6	120.5	120.4	121.6	121.6
Farm value (1982-84=100)	104.3	76.2	74.1	103.3	100.6	101.0	98.9	99.2	103.1	105.4	104.6
Farm-retail spread (1982-84=100)	110.6	117.6	120.6	116.7	115.1	124.9	127.2	128.3	126.8	127.6	127.8
Farm value-retail cost (%)	25.8	19.2	18.6	24.6	24.3	22.9	22.2	22.2	23.0	23.3	23.1

	Annual				1988		1989				
	1985	1986	1987	1988	May	Dec	Jan	Feb	Mar	Apr	May
Beef, Choice											
Retail price 2/ (cts./lb.)	232.6	230.7	242.5	254.7	253.2	260.0	264.3	265.2	269.5	269.8	271.9
Net carcass value 3/ (cts.)	135.2	133.1	145.3	153.9	166.2	158.1	159.8	160.9	167.4	169.5	167.7
Net farm value 4/ (cts.)	126.8	124.4	137.9	147.4	158.6	154.0	155.8	157.6	163.9	164.3	160.9
Farm-retail spread (cts.)	105.8	106.3	104.6	107.3	94.6	106.0	108.5	107.6	105.6	105.5	111.0
Carcass-retail spread 5/ (cts.)	97.4	97.6	97.2	100.8	87.0	101.9	104.5	104.3	102.1	100.3	104.2
Farm-carcass spread 6/ (cts.)	8.4	8.7	7.4	6.5	7.6	4.1	4.0	3.3	3.5	5.2	6.8
Farm value-retail price (%)	55	54	57	58	63	59	59	59	61	61	59
Pork											
Retail price 2/ (cts./lb.)	162.0	178.4	188.4	183.4	183.6	177.4	181.1	179.3	179.7	179.5	177.1
Wholesale value 3/ (cts.)	101.1	110.9	113.0	101.0	106.4	97.8	94.3	92.7	91.8	88.6	95.5
Net farm value 4/ (cts.)	71.4	82.4	82.7	69.4	76.1	66.0	66.7	65.2	63.3	59.0	68.4
Farm-retail spread (cts.)	90.6	96.0	105.7	114.0	107.5	111.4	114.4	114.1	116.4	120.5	108.7
Wholesale-retail spread 5/ (cts.)	60.9	67.5	75.4	82.4	77.2	79.6	86.8	86.6	87.9	90.9	81.6
Farm-wholesale spread 6/ (cts.)	29.7	28.5	30.3	31.6	30.3	31.8	27.6	27.5	28.5	29.6	27.1
Farm value-retail price (%)	44	46	44	38	41	37	37	36	35	33	39

1/ Retail costs are based on indexes of retail prices for domestically produced farm foods from the CPI-U published monthly by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale & may include marketing charges such as grading & packing for some commodities. The farm-retail spread, the difference between the retail price & the farm value, represents charges for assembling, processing, transporting, distributing these foods. 2/ Estimated weighted average price of retail cuts from pork & choice yield grade 3 beef carcasses. Retail cut prices from BLS. 3/ Value of carcass quantity (beef) & wholesale cuts (pork) equivalent to 1 lb. of retail cuts; beef adjusted for value of fat & bone byproducts. 4/ Market value to producer for quantity of live animal equivalent to 1 lb. of retail cuts minus value of byproducts. 5/ Represents charges for retailing & other marketing services such as fabricating, wholesaling, in-city transportation. 6/ Represents charges made for livestock marketing, processing, & transportation to city where consumed.

Information contacts: Denis Dunham (202) 786-1870, Ron Gustafson (202) 786-1286.

Table 9.—Price Indexes of Food Marketing Costs

(See the June 1989 Issue.)

Information contact: Denis Dunham (202) 786-1870

Table 10.—U.S. Meat Supply & Use

	Beg. stocks	Production 1/	Imports	Total supply	Exports	Shipments	Ending stocks	Consumption: Total	Consumption: Per capita 2/	Primary market price 3/
	Million pounds 4/								Pounds	
Beef										
1986	420	24,371	2,129	26,919	521	52	412	25,935	78.4	57.75
1987	412	23,566	2,269	26,247	604	52	386	25,205	73.4	64.60
1988 P	386	23,589	2,379	26,354	680	61	422	25,191	72.6	69.54
1989 F	422	22,944	2,200	25,566	800	60	325	24,381	69.6	71-74
Pork										
1986	289	14,063	1,122	15,474	86	132	248	15,008	58.6	51.19
1987	248	14,374	1,195	15,817	109	124	347	15,237	59.1	51.69
1988 P	347	15,684	1,137	17,168	195	135	413	16,425	63.0	43.39
1989 F	413	15,973	1,000	17,386	185	140	400	16,661	63.5	40-43
Veal 5/										
1986	11	524	27	562	5	1	7	550	1.9	60.89
1987	7	429	24	460	7	1	4	449	1.5	78.05
1988 P	4	396	27	427	10	1	5	411	1.4	89.79
1989 F	5	369	0	374	0	1	4	369	1.2	89-92
Lamb & mutton										
1986	13	338	41	392	2	2	13	375	1.4	70.26
1987	13	315	44	372	2	2	8	360	1.3	78.09
1988 P	8	335	51	394	1	1	6	386	1.4	68.84
1989 F	6	338	53	397	1	0	7	389	1.4	65-68
Total red meat										
1986	733	39,296	3,319	43,348	613	187	680	41,868	140.2	--
1987	679	38,684	3,533	42,897	722	179	744	41,251	135.3	--
1988 P	745	40,004	3,594	44,343	886	198	846	42,413	138.4	--
1989 F	846	39,624	3,253	43,723	986	201	736	41,800	135.8	--
Broilers										
1986	27	14,316	0	14,342	566	149	24	13,603	56.3	56.9
1987	24	15,594	0	15,618	752	151	25	14,691	60.2	47.4
1988 P	25	16,180	0	16,205	765	151	36	15,253	61.9	56.3
1989 F	36	17,207	0	17,243	825	140	30	16,248	65.3	60-63
Mature chicken										
1986	144	627	0	771	16	3	163	589	2.4	--
1987	163	650	0	814	15	2	188	608	2.5	--
1988 P	188	638	0	826	26	3	157	641	2.6	--
1989 F	157	628	0	784	20	4	150	610	2.5	--
Turkeys										
1986	150	3,271	0	3,422	27	4	178	3,212	13.3	72.2
1987	178	3,828	0	4,006	33	4	282	3,686	15.1	57.8
1988 P	282	3,968	0	4,250	51	2	250	3,948	16.0	61.3
1989 F	250	4,119	0	4,368	36	4	280	4,048	16.3	68-71
Total poultry										
1986	321	18,215	0	18,535	609	156	365	17,405	72.0	--
1987	365	20,072	0	20,437	800	157	495	18,985	77.8	--
1988 P	495	20,786	0	21,281	843	156	442	19,841	80.5	--
1989 F	442	21,953	0	22,396	881	148	460	20,907	84.1	--
Red meat & poultry										
1986	1,054	57,511	3,319	61,883	1,223	343	1,045	59,273	212.3	--
1987	1,044	58,756	3,532	63,333	1,521	336	1,240	60,229	213.2	--
1988 P	1,240	60,790	3,594	65,624	1,729	354	1,288	62,254	218.9	--
1989 F	1,288	61,577	3,253	66,119	1,867	349	1,196	62,707	219.8	--

1/ Total including farm production for red meats & federally inspected plus nonfederally inspected for poultry. 2/ Retail weight basis. (The beef carcass-to-retail conversion factor was .74 during 1962-85. It was lowered to .73 for 1986 & to .71 for 1987 & later.) 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Choice steers, Omaha 1,000-1,100 lb.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb & mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats & certified ready-to-cook for poultry. 5/ Beginning 1989 veal trade no longer reported separately. P = Preliminary. F = forecast. -- = not available.

Information contacts: Ron Gustafson, Leland Southard, or Mark Weimar (202) 786-1285.

Table 11.—U.S. Egg Supply & Use

	Beg. stocks	Production	Imports	Total supply	Exports	Shipments	Hatching use	Ending stocks	Consumption: Total	Consumption: Per capita	Wholesale price*
	Million dozen									No.	Cts./doz.
1984	9.3	5,708.3	32.0	5,749.7	58.2	27.8	529.7	11.1	5,122.8	259.4	80.9
1985	11.1	5,688.0	12.7	5,711.8	70.6	30.3	548.1	10.7	5,052.0	253.3	66.4
1986	10.7	5,705.0	13.7	5,729.4	101.6	28.0	566.8	10.4	5,022.6	249.4	71.1
1987	10.4	5,802.3	5.6	5,818.3	111.2	25.1	599.1	14.4	5,068.5	249.3	61.6
1988	14.4	5,771.1	5.3	5,790.8	141.8	25.2	604.3	15.2	5,004.3	244.0	62.1
1989 F	15.2	5,651.0	10.9	5,677.1	101.7	24.0	635.0	10.0	4,906.4	236.8	73-77

* Cartoned grade A large eggs, New York. F = forecast.

Information contact: Maxine Davis (202) 786-1714.

Table 12.—U.S. Milk Supply & Use[1]

	Production	Farm use	Commercial: Farm marketings	Commercial: Beg. stocks	Imports	Total commercial supply	CCC net removals	Commercial: Ending stocks	Commercial: Disappearance	All milk price 2/
	Billion pounds									$/cwt
1981	132.8	2.3	130.5	5.8	2.3	138.5	12.9	5.4	120.3	13.77
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61
1983	139.7	2.4	137.3	4.6	2.6	144.5	16.8	5.2	122.5	13.58
1984	135.4	2.9	132.5	5.2	2.7	140.5	8.6	4.9	126.9	13.46
1985	143.1	2.5	140.7	4.9	2.8	148.4	13.2	4.6	130.6	12.75
1986	143.4	2.4	141.0	4.6	2.7	148.3	10.6	4.2	133.5	12.51
1987	142.5	2.2	140.3	4.2	2.5	146.9	6.7	4.6	135.6	12.54
1988 P	145.5	2.2	143.3	4.6	2.4	150.3	8.9	4.3	137.1	12.24
1989 F	147.5	2.2	145.3	4.3	2.4	152.0	8.8	4.2	139.0	12.75

1/ Milkfat basis. Totals may not add because of rounding. 2/ Delivered to plants & dealers; does not reflect deductions. F = forecast.

Information contact: Jim Miller (202) 786-1770.

Table 13.—Poultry & Eggs

	Annual: 1986	Annual: 1987	Annual: 1988	1988: May	1988: Dec	1989: Jan	1989: Feb	1989: Mar	1989: Apr	1989: May
Broilers										
Federally inspected slaughter, certified (mil. lb.)	14,265.6	15,502.5	15,984.0	1,367.3	1,328.4	1,386.0	1,270.1	1,473.4	1,333.5	1,527.2
Wholesale price, 12-city (cts./lb.)	56.9	47.4	56.3	56.6	58.8	58.0	58.1	62.1	63.5	70.4
Price of grower feed ($/ton)	187	186	220	182	254	243	243	242	243	238
Broiler-feed price ratio 1/	3.7	3.7	3.1	4.1	2.8	2.9	2.9	3.2	3.8	3.6
Stocks beginning of period (mil. lb.)	26.6	23.9	24.8	40.8	35.3	35.9	32.8	32.5	32.4	37.9
Broiler-type chicks hatched (mil.) 2/	5,013.3	5,379.2	5,588.7	487.0	487.5	481.3	442.8	502.5	493.5	522.9
Turkeys										
Federally inspected slaughter, certified (mil. lb.)	3,133	3,717	3,903	331.3	272.8	254.1	248.1	301.3	268.8	356.6
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts./lb.)	72.2	57.8	61.3	48.7	61.6	59.0	62.2	65.7	68.3	71.4
Price of turkey grower feed ($/ton)	215	213	243	213	269	262	264	258	256	255
Turkey-feed price ratio 1/	4.1	3.9	3.0	2.8	2.8	2.7	2.9	3.1	3.3	3.4
Stocks beginning of period (mil. lb.)	150.2	178.2	282.4	370.7	303.5	249.7	262.5	263.1	267.3	298.5
Poults placed in U.S. (mil.)	225.4	240.4	242.0	25.6	20.4	23.1	23.7	26.9	26.4	28.6
Eggs										
Farm production (mil.)	68,460	69,627	69,253	5,829	5,824	5,721	5,173	5,777	5,565	5,683
Average number of layers (mil.)	278	280	286	274	273	272	272	270	267	267
Rate of lay (eggs per layer on farms)	248	248	251	21.2	21.3	21.1	19.0	21.4	20.7	21.3
Cartoned price, New York, grade A large (cts./doz.) 3/	71.1	61.6	62.1	50.9	70.7	72.0	74.8	92.7	76.6	73.7
Price of laying feed ($/ton)	174	170	202	176	221	217	214	214	211	210
Egg-feed price ratio 1/	7.0	7.6	5.3	5.0	5.4	5.9	5.8	7.5	6.2	5.9
Stocks, first of month										
Shell (mil. doz.)	.72	1.16	1.29	.42	.78	.27	.36	.21	.48	.54
Frozen (mil. doz.)	10.0	9.8	13.1	13.2	13.6	14.9	14.9	14.4	11.2	11.6
Replacement chicks hatched (mil.)	424	428	366	36.0	27.0	26.6	27.2	32.7	35.9	38.3

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks is currently reported for 12 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Price of cartoned eggs to volume buyers for delivery to retailers. P = preliminary.

Information contact: Maxine Davis (202) 786-1714.

Table 14.—Dairy

	Annual			1988		1989				
	1986	1987	1988	May	Dec	Jan	Feb	Mar	Apr	May
Milk prices, Minnesota-Wisconsin, 3.5% fat ($/cwt) 1/	11.30	11.23	11.03	10.34	12.27	11.90	11.26	10.98	11.09	11.12
Wholesale prices										
Butter, grade A Chi. (cts./lb.)	144.5	140.2	132.5	131.0	131.2	131.0	131.0	131.0	131.0	131.0
Am. cheese, Wis. assembly pt. (cts./lb.)	127.3	123.2	123.8	115.0	136.0	129.1	117.6	117.8	120.4	123.9
Nonfat dry milk (cts./lb.) 2/	80.6	79.3	80.2	73.4	92.7	93.6	83.6	79.6	81.1	84.5
USDA net removals										
Total milk equiv. (mil. lb.) 3/	10,628.1	6,706.0	8,856.2	1,226.7	448.7	1,563.2	1,471.6	1,156.5	1,398.8	1,468.3
Butter (mil. lb.)	287.6	187.3	312.6	42.4	19.8	73.8	67.0	54.4	64.1	66.4
Am. cheese (mil. lb.)	468.4	282.0	238.1	35.0	3.8	3.5	8.5	3.0	7.0	9.3
Nonfat dry milk (mil. lb.)	827.3	559.4	267.5	53.6	0	0	0	0	0	0
Milk										
Milk prod. 21 States (mil. lb.)	121,433	121,294	123,896	11,064	10,251	10,476	9,839	10,860	10,770	11,095
Milk per cow (lb.)	13,399	13,955	14,378	1,282	1,193	1,220	1,148	1,272	1,263	1,304
Number of milk cows (1,000)	9,063	8,692	8,617	8,631	8,594	8,577	8,562	8,544	8,535	8,516
U.S. milk production (mil. lb.)	143,381	142,557	145,527	6/13,000	6/12,041	6/12,315	6/11,566	6/12,766	6/12,656	6/13,037
Stock, beginning										
Total (mil. lb.)	13,695	12,867	7,440	9,520	8,382	8,189	8,927	10,448	11,000	11,870
Commercial (mil. lb.)	4,590	4,165	4,646	5,131	4,069	4,289	4,673	5,018	4,940	5,140
Government (mil. lb.)	9,105	8,702	2,794	4,389	4,313	3,900	4,254	5,430	6,059	6,729
Imports, total (mil. lb.) 3/	2,733	2,490	2,394	159	235	213	170	181	177	--
Commercial disappearance (mil. lb.)	133,498	135,657	137,187	11,553	11,418	10,392	9,748	11,680	11,051	--
Butter										
Production (mil. lb.)	1,202.4	1,104.1	1,207.5	108.0	112.0	129.0	124.7	135.7	124.7	122.5
Stocks, beginning (mil. lb.)	205.5	193.0	143.2	240.4	226.2	214.7	246.6	314.4	341.9	379.1
Commercial disappearance (mil. lb.)	922.9	902.5	909.8	60.6	94.6	45.5	47.8	86.9	55.6	--
American cheese										
Production (mil. lb.)	2,798.2	2,716.7	2,756.6	253.1	235.0	225.6	208.7	231.9	236.2	247.0
Stocks, beginning (mil. lb.)	850.2	697.1	370.4	375.6	282.5	293.0	288.4	293.5	284.6	288.7
Commercial disappearance (mil. lb.)	2,382.8	2,437.1	2,570.0	215.4	205.6	216.2	189.1	228.5	228.8	--
Other cheese										
Production (mil. lb.)	2,411.1	2,627.7	2,815.0	235.1	251.5	230.9	210.8	256.5	236.4	247.9
Stocks, beginning (mil. lb.)	94.1	92.0	89.7	92.7	105.9	104.7	111.4	111.4	110.9	117.0
Commercial disappearance (mil. lb.)	2,684.9	2,880.2	3,034.1	250.0	278.2	239.3	225.2	274.2	245.6	--
Nonfat dry milk										
Production (mil. lb.)	1,284.1	1,056.8	978.5	106.6	75.8	87.1	85.6	95.7	99.8	99.8
Stocks, beginning (mil. lb.)	1,011.1	686.8	177.2	171.4	50.4	53.1	66.3	84.4	88.3	100.8
Commercial disappearance (mil. lb.)	479.1	492.9	733.1	50.0	69.9	71.9	66.5	91.0	86.5	--
Frozen dessert										
Production (mil. gal.) 4/	1,248.6	1,260.7	1,246.9	116.7	79.1	80.5	86.6	108.0	104.3	122.6

	Annual			1987	1988				1989	
	1986	1987	1988	IV	I	II	III	IV	I P	II P
Milk production (mil. lb.)	143,381	142,557	145,527	34,811	36,197	37,871	36,025	35,434	36,647	38,044
Milk per cow (lb.)	13,260	13,802	14,213	3,385	3,519	3,697	3,526	3,471	3,611	3,763
No. of milk cows (1,000)	10,813	10,329	10,239	10,285	10,285	10,244	10,218	10,208	10,148	10,110
Milk-feed price ratio 5/	1.73	1.83	1.58	1.89	1.74	1.51	1.46	1.59	1.56	1.47
Returns over concentrate costs ($/cwt milk) 5/	9.23	9.52	9.05	9.97	9.34	8.33	8.53	9.86	9.63	8.80

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area, high heat spray process. 3/ Milk equivalent, fat basis. 4/ Ice cream, ice milk, & hard sherbet. 5/ Based on average milk price after adjustment for price support deductions. 6/ Estimated. P = preliminary. -- = not available.

Information contact: Jim Miller (202) 786-1770.

Table 15.—Wool

	Annual			1988		1989				
	1986	1987	1988	May	Dec	Jan	Feb	Mar	Apr	May P
U.S. wool price, 1/ (cts./lb.)	191	265	438	463	450	450	438	410	375	375
Imported wool price, 2/ (cts./lb.)	201	247	372	413	391	432	417	387	363	339
U.S. mill consumption, scoured										
Apparel wool (1,000 lb.)	126,768	129,677	128,325	9,601	12,097	10,610	11,074	13,718	10,400	9,287
Carpet wool (1,000 lb.)	9,960	13,092	15,825	1,282	1,005	800	1,314	1,559	1,595	1,357

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" & up. 2/ Wool price, Charleston, SC warehouse, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents. P = preliminary.

Information contact: John Lawler (202) 786-1840.

Table 16.—Meat Animals

	Annual			1988		1989				
	1986	1987	1988	May	Dec	Jan	Feb	Mar	Apr	May
Cattle on feed (7 States)										
Number on feed (1,000 head) 1/	7,920	7,643	8,066	7,519	8,000	7,765	7,700	7,661	8,012	7,847
Placed on feed (1,000 head)	20,035	21,040	20,584	2,165	1,401	1,711	1,585	1,975	1,534	1,619
Marketings (1,000 head)	19,263	19,410	19,698	1,724	1,521	1,672	1,509	1,549	1,570	1,747
Other disappearance (1,000 head)	1,049	1,207	1,187	141	115	104	115	75	129	164
Beef steer-corn price ratio, Omaha 2/	31.0	41.0	31.5	39.3	27.9	28.2	28.7	29.4	30.2	29.4
Hog-corn price ratio, Omaha 2/	27.8	32.8	19.6	22.5	16.2	16.4	16.3	15.4	14.8	16.8
Market prices ($/cwt)										
Slaughter cattle										
Choice steers, Omaha	57.75	64.60	69.54	75.15	71.21	72.35	72.92	75.75	75.31	74.52
Utility cows, Omaha	37.19	44.83	46.55	48.79	45.14	44.88	46.92	45.89	45.19	45.57
Choice vealers, S. St. Paul 3/	59.92	78.74	90.23	97.66	225.63	229.63	225.06	257.50	269.06	260.05
Feeder cattle										
Choice, Kansas City, 600-700 lb.	62.79	75.36	83.67	82.88	86.13	86.00	85.56	84.45	82.63	83.50
Slaughter hogs										
Barrows & gilts, 7-markets	51.19	51.69	43.39	47.55	40.58	41.58	40.91	39.85	37.06	42.37
Feeder pigs										
S. Mo. 40-50 lb. (per head)	45.62	46.69	38.88	46.85	29.17	35.25	34.18	39.55	34.74	34.24
Slaughter sheep & lambs										
Lambs, Choice, San Angelo	69.46	78.09	68.84	72.67	68.83	68.13	68.83	70.90	78.17	73.56
Ewes, Good, San Angelo	34.78	38.62	38.88	36.38	42.08	48.13	53.28	47.55	42.45	38.95
Feeder lambs										
Choice, San Angelo	73.14	102.26	90.91	90.63	84.83	84.38	97.17	95.30	88.06	78.18
Wholesale meat prices, Midwest										
Choice steer beef, 600-700 lb.	88.98	97.21	103.34	111.70	106.20	107.30	107.98	112.43	113.84	112.62
Canner & cutter cow beef	71.31	83.70	87.77	89.88	90.03	91.23	96.93	92.17	89.77	89.74
Pork loins, 14-18 lb. 4/	104.78	106.23	97.49	112.75	93.61	89.35	90.97	91.77	91.59	99.95
Pork bellies, 12-14 lb.	65.82	63.11	41.25	46.09	34.82	36.91	31.41	30.91	25.49	29.11
Hams, skinned, 14-17 lb.	80.01	80.96	71.03	67.70	65.50	64.61	67.11	63.00	61.60	63.30
All fresh beef retail price 5/	--	212.64	224.35	221.50	232.97	234.05	233.94	238.50	237.33	238.30
Commercial slaughter (1,000 head)*										
Cattle	37,288	35,647	35,072	2,908	2,774	2,789	2,568	2,822	2,644	3,024
Steers	17,516	17,443	17,341	1,510	1,354	1,327	1,261	1,400	1,336	1,521
Heifers	11,097	10,906	10,755	850	816	850	808	840	763	907
Cows	7,961	6,610	6,334	494	554	561	457	532	493	540
Bulls & stags	714	689	642	56	49	51	42	50	52	56
Calves	3,408	2,815	2,504	179	211	203	181	200	158	163
Sheep & lambs	5,635	5,199	5,293	427	460	428	425	519	409	447
Hogs	79,598	81,081	87,738	6,884	7,946	7,332	6,791	7,763	7,380	7,480
Commercial production (mil. lb.)										
Beef	24,213	23,405	23,419	1,918	1,872	1,896	1,744	1,889	1,757	1,998
Veal	509	416	387	30	32	32	28	31	27	29
Lamb & mutton	331	309	329	27	29	27	27	33	26	28
Pork	13,998	14,312	15,614	1,231	1,425	1,310	1,204	1,373	1,321	1,341

	Annual			1988				1989		
	1986	1987	1988	I	II	III	IV	I	II	III
Cattle on feed (13 States)										
Number on feed (1,000 head) 1/	9,754	9,245	9,769	9,769	9,385	9,001	8,591	9,408	9,678	--
Placed on feed (1,000 head)	23,583	24,894	24,353	5,824	5,893	5,986	6,650	6,212	--	--
Marketings (1,000 head)	22,856	22,991	23,339	5,823	5,859	6,171	5,486	5,598	7/6,088	--
Other disappearance (1,000 head)	1,236	1,379	1,375	385	418	225	347	344	--	--
Hogs & pigs (10 States) 6/										
Inventory (1,000 head) 1/	41,100	39,690	42,995	42,995	41,345	44,065	45,000	43,210	41,605	43,690
Breeding (1,000 head) 1/	5,258	5,110	5,510	5,510	5,520	5,630	5,460	5,335	5,420	5,560
Market (1,000 head) 1/	35,842	34,580	37,485	37,485	35,825	38,435	39,540	37,875	36,185	38,130
Farrowings (1,000 head)	8,223	8,838	9,316	2,123	2,578	2,359	2,261	2,109	2,535	7/2,359
Pig crop (1,000 head)	63,835	68,888	71,848	16,489	20,175	18,007	17,216	16,439	19,900	--

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Per head starting September 1988. 4/ Prior to 1984, 8-14 lb.; 1984 & 1985, 14-17 lb.; beginning 1986, 14-18 lb. 5/ New series estimating the composite price of all beef grades & ground beef sold by retail stores. This new series is in addition to, but does not replace, the series for the retail price of Choice beef that appears in table 8. 6/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 7/ Intentions. *Classes estimated. -- = not available.

Information contacts: Ron Gustafson or Leland Southard (202) 786-1285.

Table 17.—Supply & Utilization[1,2]

	Area			Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Set aside 3/	Planted	Harvested									
	Mil. acres			Bu./acre	Mil. bu.							$/bu.
Wheat												
1984/85	18.3	79.2	66.9	38.8	2,595	4,003	405	749	1,424	2,578	1,425	3.39
1985/86	18.8	75.6	64.7	37.5	2,425	3,866	279	767	915	1,961	1,905	3.08
1986/87	20.2	72.1	60.7	34.4	2,092	4,018	413	780	1,004	2,197	1,821	2.42
1987/88	27.9	65.8	56.0	37.7	2,107	3,945	288	804	1,592	2,684	1,261	2.57
1988/89*	30.1	65.5	53.2	34.1	1,811	3,096	210	830	1,440	2,480	616	3.74
1989/90*		76.8	63.5	33.4	2,117	2,832	175	840	1,225	2,240	592	3.75-4.10
	Mil. acres			Lb./acre	Mil. cwt (rough equiv.)							$/cwt
Rice												
1984/85	.79	2.83	2.80	4,954	138.8	187.3	--	6/60.5	62.1	122.6	64.7	8.04
1985/86	1.24	2.51	2.49	5,414	134.9	201.8	--	6/65.8	58.7	124.5	77.3	6.53
1986/87	1.48	2.38	2.36	5,651	133.4	213.3	--	6/77.7	84.2	161.9	51.4	3.75
1987/88	1.51	2.36	2.33	5,555	129.6	184.0	--	6/80.4	72.2	152.6	31.4	7.27
1988/89*	.93	2.93	2.90	5,511	159.5	194.6	--	6/86.2	76.0	162.2	32.4	6.50-7.00
1989/90*					153.0	189.6	--	6/89.6	74.0	163.6	26.0	7.00-8.50
	Mil. acres			Bu./acre	Mil. bu.							$/bu.
Corn												
1984/85	3.9	80.5	71.9	106.7	7,674	8,684	4,079	1,091	1,865	7,036	1,648	2.63
1985/86	5.4	83.4	75.2	118.0	8,877	10,536	4,095	1,160	1,241	6,496	4,040	2.23
1986/87	13.5	76.7	69.2	119.3	8,250	12,291	4,714	1,192	1,504	7,410	4,882	1.50
1987/88	25.6	65.7	59.2	119.4	7,072	11,958	4,738	1,229	1,732	7,699	4,259	1.94
1988/89*	23.6	67.6	58.2	84.6	4,921	9,185	4,000	1,255	2,100	7,355	1,830	2.50-2.60
1989/90*					7,450	9,283	4,200	1,300	1,950	7,450	1,833	1.75-2.25
	Mil. acres			Bu./acre	Mil. bu.							$/bu.
Sorghum												
1984/85	.6	17.3	15.4	56.4	866	1,154	539	18	297	854	300	2.32
1985/86	.9	18.3	16.8	66.8	1,120	1,420	664	28	178	869	551	1.93
1986/87	3.0	15.3	13.9	67.7	938	1,489	535	12	198	746	743	1.37
1987/88	5.2	11.8	10.6	69.7	739	1,483	564	25	231	820	663	1.70
1988/89*	5.8	10.4	9.1	63.8	578	1,240	475	25	300	800	440	2.25-2.35
1989/90*					700	1,105	525	35	250	810		1.55-1.95
	Mil. acres			Bu./acre	Mil. bu.							$/bu.
Barley												
1984/85	.5	12.0	11.2	53.4	599	799	304	170	77	551	247	2.29
1985/86	.7	13.2	11.6	51.0	591	848	333	169	22	523	325	1.98
1986/87	2.1	13.1	12.0	50.8	611	944	298	174	137	608	336	1.61
1987/88	4.0	11.0	10.1	52.7	530	879	258	174	126	558	321	1.81
1988/89*	4.8	9.7	7.5	38.6	291	623	161	180	85	426	197	2.79
1989/90*		9.3	8.7	51.3	445	652	200	180	75	455	197	1.85-2.25
	Mil. acres			Bu./acre	Mil. bu.							$/bu.
Oats												
1984/85	.1	12.4	8.2	58.0	474	689	433	74	1	509	180	1.67
1985/86	.1	13.3	8.2	63.7	521	728	460	82	2	544	184	1.23
1986/87	.6	14.7	6.9	56.3	386	603	395	73	3	471	133	1.21
1987/88	1.3	18.0	6.9	54.0	374	553	361	79	1	441	112	1.56
1988/89*	1.2	13.9	5.6	39.1	219	396	196	100	1	297	98	2.61
1989/90*					388	536	300	110	2	412	124	1.55-1.95
	Mil. acres			Bu./acre	Mil. bu.							$/bu.
Soybeans												
1984/85	0	67.8	66.1	28.1	1,861	2,037	7/93	1,030	598	1,721	316	5.84
1985/86	0	63.1	61.6	34.1	2,099	2,415	7/86	1,053	740	1,879	536	5.05
1986/87	0	60.4	58.3	33.3	1,940	2,476	7/104	1,179	757	2,040	436	4.78
1987/88	0	58.0	57.0	33.7	1,923	2,359	7/81	1,174	802	2,057	302	5.88
1988/89*	0	58.9	57.4	26.8	1,539	1,841	7/96	1,070	550	1,716	125	7.35
1989/90*		61.3	60.2	32.4	1,950	2,075	7/95	1,115	600	1,810	265	4.75-6.25
								Mil. lbs.				8/ Cts./lb.
Soybean oil												
1984/85	--	--	--	--	11,468	12,209	--	9,917	1,660	11,577	632	29.50
1985/86	--	--	--	--	11,617	12,257	--	10,053	1,257	11,310	947	18.00
1986/87	--	--	--	--	12,783	13,745	--	10,833	1,187	12,020	1,725	15.40
1987/88	--	--	--	--	9/ 12,974	14,895	--	10,930	1,873	12,803	2,092	22.65
1988/89*	--	--	--	--	9/ 11,768	14,060	--	10,500	1,300	11,800	2,260	21.50
1989/90*					12,385	14,500		11,000	1,400	12,400	2,100	19.50-23.50
								1,000 tons				10/ $/ton
Soybean meal												
1984/85	--	--	--	--	24,529	24,784	--	19,480	4,917	24,397	387	125
1985/86	--	--	--	--	24,951	25,338	--	19,090	6,036	25,126	212	155
1986/87	--	--	--	--	27,758	27,970	--	20,387	7,343	27,730	240	163
1987/88	--	--	--	--	28,060	28,300	--	21,276	6,871	28,147	153	222
1988/89*	--	--	--	--	24,897	25,050	--	19,500	5,250	24,750	300	230
1989/90*					26,500	26,800		21,000	5,500	26,500	300	140-180

See footnotes at end of table.

Table 17.—Supply & Utilization, continued

	Area						Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Set aside 3/	Planted	Harvested	Yield	Production	Total supply 4/						
	Mil. acres			Lb./acre	Mil. bales							Cts./lb.
Cotton 11/												
1984/85	2.5	11.1	10.4	600	13.0	15.8	--	5.5	6.2	11.8	4.1	58.70
1985/86	3.6	10.7	10.2	630	13.4	17.6	--	6.4	2.0	8.4	9.4	56.50
1986/87	3.4	10.0	8.5	552	9.7	19.1	--	7.4	6.7	14.1	5.0	52.40
1987/88	3.2	10.4	10.0	706	14.8	19.8	--	7.6	6.6	14.2	5.8	64.30
1988/89*	1.6	12.5	11.9	619	15.4	21.2	--	7.5	6.1	13.6	7.7	55.50
1989/90*					12.0	19.7	--	7.5	7.8	15.3	4.5	--

*July 13, 1989 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, & oats, August 1 for cotton & rice, September 1 for soybeans, corn, & sorghum, October 1 for soymeal & soyoil. 2/ Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt of rice, and 4.59 480-pound bales of cotton. 3/ Includes diversion, PIK, & acreage reduction programs. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding & Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Includes 196 million pounds in imports for 1987/88 & 300 million in 1988/89. 10/ Average of 44 percent, Decatur. 11/ Upland & extra long staple. Stock estimates based on Census Bureau data, resulting in an unaccounted difference between supply & use estimates & changes in ending stocks. -- = not available.

Information contact: Commodity Economics Division, Crops Branch (202) 786-1840.

Table 18.—Food Grains

	Marketing year 1/				1988	1989				
	1984/85	1985/86	1986/87	1987/88	May	Jan	Feb	Mar	Apr	May
Wholesale prices										
Wheat, No. 1 HRW, Kansas City ($/bu.) 2/	3.74	3.28	2.72	2.96	3.20	4.40	4.37	4.32	4.46	4.55
Wheat, DNS, Minneapolis ($/bu.) 2/	3.70	3.25	2.62	2.92	3.30	4.42	4.37	4.46	4.45	4.50
Rice, S.W. La. ($/cwt) 3/	17.98	16.11	10.25	19.25	15.40	14.00	14.20	13.80	13.50	15.40
Wheat										
Exports (mil. bu.)	1,424	915	1,004	1,592	154	120	134	149	122	--
Mill grind (mil. bu.)	676	703	755	753	65	63	59	59	59	--
Wheat flour production (mil. cwt)	301	314	335	336	29	29	27	26	27	--
Rice										
Exports (mil. cwt, rough equiv.)	62.1	58.7	84.2	72.2	7.3	10.0	9.1	10.0	6.5	--

	Marketing year 1/			1987	1988				1989	
	1985/86	1986/87	1987/88	Sept-Nov	Dec-Feb	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb	Mar-May
Wheat										
Stocks, beginning (mil. bu.)	1,425	1,905	1,821	2,976.5	2,500.6	1,923.5	1,260.8	2,253.6	1,709.9	1,221.7
Domestic use										
Food (mil. bu.)	674	696	719	191.1	168.6	180.0	179.2	194.4	168.6	182.8
Seed, feed & residual (mil. bu.) 4/	279	413	288	-76.6	-5.0	2.6	283.6	-40.4	-41.1	-30.1
Exports (mil. bu.)	915	1,004	1,592	308.5	413.1	460.6	363.4	330.1	363.1	383.4

1/ Beginning June 1 for wheat & August 1 for rice. 2/ Ordinary protein. 3/ Long grain, milled basis. 4/ Residual includes feed use. -- = not available.

Information contacts: Ed Allen & Janet Livezey (202) 786-1840.

Table 19.—Cotton

	Marketing year 1/				1988	1989				
	1984/85	1985/86	1986/87	1987/88	May	Jan	Feb	Mar	Apr	May
U.S. price, SLM, 1-1/16 in. (cts./lb.) 2/	60.5	60.0	53.2	63.1	61.6	55.7	55.4	57.6	61.4	63.7
Northern Europe prices										
Index (cts./lb.) 3/	69.2	48.9	62.0	72.7	65.6	63.1	63.0	66.0	73.8	77.3
U.S. M 1-3/32 in. (cts./lb.) 4/	73.9	64.8	61.8	76.3	75.3	67.2	68.1	70.0	74.1	76.9
U.S. mill consumpt. (1,000 bales)	5,545	6,399	7,452	7,617	630	629	595	706	636	749
Exports (thou bales)	6,201	1,969	6,684	6,582	517	483	738	629	627	754
Stocks, beginning (1,000 bales)	2,775	4,102	9,348	5,026	8,689	15,635	15,170	13,947	12,613	11,350

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Outlook (A) index; average of five lowest priced of 11 selected growths. 4/ Memphis territory growths.

Information contact: Bob Skinner (202) 786-1840.

Table 20.—Feed Grains

	Marketing year 1/				1988	1989				
	1984/85	1985/86	1986/87	1987/88	May	Jan	Feb	Mar	Apr	May
Wholesale prices										
Corn, no. 2 yellow, Chicago ($/bu.)	2.79	2.35	1.64	2.14	2.09	2.74	2.72	2.78	2.72	2.77
Sorghum, no. 2 yellow, Kansas City ($/cwt)	4.46	3.72	2.73	3.40	3.21	4.24	4.26	4.32	4.17	4.29
Barley, feed, Duluth ($/bu.) 2/	2.09	1.53	1.44	1.78	1.98	2.24	2.33	2.49	2.52	2.41
Barley, malting, Minneapolis ($/bu.)	2.55	2.24	1.89	2.04	2.24	4.14	4.19	4.33	4.29	3.84
Exports 3/										
Corn (mil. bu.)	1,865	1,241	1,504	1,732	180.2	175.2	154.9	202.8	177.5	--
Feed grains (mil. metric tons) 4/	56.6	36.6	46.3	52.6	5.3	5.3	4.8	6.0	5.5	--

	Marketing year 1/				1988			1989		
	1984/85	1985/86	1986/87	1987/88	Mar-May	Jun-Aug	Sept-Nov	Dec-Feb	Mar-May	Apr-June
Corn										
Stocks, beginning (mil. bu.)	1,006	1,648	4,040	4,882	7,635	5,836	4,259	7,072	5,205	3,419
Domestic use										
Feed (mil. bu.)	4,079	4,095	4,714	4,746	960	839	1,338	1,077	853	--
Food, seed, ind. (mil. bu.)	1,091	1,160	1,192	1,224	315	323	294	284	322	--
Exports (mil. bu.)	1,865	1,241	1,504	1,720	514	414	482	510	595	--
Total use (mil. bu.)	7,036	6,496	7,410	7,690	1,804	1,577	2,109	1,869	1,787	--

1/ September 1 for corn & sorghum; June 1 for oats & barley. 2/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. 3/ Excludes products. 4/ Aggregated data for corn, sorghum, oats, & barley. -- not available.

Information contact: James Cole (202) 786-1840.

Table 21.—Fats & Oils

	Marketing year *				1988		1989			
	1984/85	1985/86	1986/87	1987/88	Apr	Dec	Jan	Feb	Mar	Apr
Soybeans										
Wholesale price, no. 1 yellow, Chicago ($/bu.)	5.88	5.20	5.03	6.67	6.64	7.74	7.70	7.45	7.62	7.25
Crushings (mil. bu.)	1,030.5	1,052.8	1,178.8	1,174.5	102.6	100.7	99.8	85.8	93.5	89.6
Exports (mil. bu.)	598.2	740.7	756.9	801.6	66.7	69.3	66.6	56.8	67.9	41.4
Stocks, beginning (mil. bu.)	175.7	316.0	536.0	436.0	133.8	147.4	138.6	131.9	112.0	99.2
Soybean oil										
Wholesale price, crude, Decatur (cts./lb.)	29.52	18.02	15.36	22.92	21.67	22.16	21.13	21.21	22.11	21.97
Production (mil. lb.)	11,467.9	11,617.3	12,783.1	12,974.5	1,132.7	1,110.4	1,105.8	952.3	1,041.2	1,004.0
Domestic disap. (mil. lb.)	9,888.5	10,045.9	10,820.2	10,734.1	1,002.5	753.7	838.0	687.2	937.8	1,032.9
Exports (mil. lb.)	1,659.9	1,257.3	1,184.5	1,873.2	87.7	119.9	104.5	65.8	112.4	105.5
Stocks, beginning (mil. lb.)	720.5	632.5	946.6	1,725.0	2,342.8	2,303.0	2,539.9	2,703.2	2,902.4	2,893.4
Soybean meal										
Wholesale price, 44% protein, Decatur ($/ton)	125.46	154.88	162.61	221.90	200.40	246.00	249.30	234.10	237.10	220.75
Production (1,000 ton)	24,529.3	24,951.3	27,758.8	28,060.2	2,449.9	2,390.0	2,359.8	2,036.3	2,218.8	2,126.6
Domestic disap. (1,000 ton)	19,481.3	19,117.2	20,387.4	21,275.9	1,654.9	1,737.9	1,723.2	1,570.8	1,615.8	1,456.7
Exports (1,000 ton)	4,916.5	6,009.3	7,343.0	6,871.0	739.1	594.1	548.0	512.1	760.9	610.9
Stocks, beginning (1,000 ton)	255.4	386.9	211.7	240.2	243.7	295.6	353.6	442.3	395.7	237.9
Margarine, wholesale price, Chicago, white (cts./lb.)	55.5	51.2	40.3	40.3	47.19	55.26	54.63	54.00	55.44	55.76

* Beginning September 1 for soybeans; October 1 for soymeal & oil; calendar year for margarine.

Information contacts: Roger Hoskin (202) 786-1840, Tom Bickerton (202) 786-1824.

Table 22.—Farm Programs, Price Supports, Participation & Payment Rates

	Target price	Loan rate	Findley loan rate	Payment rates: Deficiency	Payment rates: Paid land diversion	Payment rates: PIK	Base acres 1/	Program 2/	Participation rate 3/
			$/bu.			Percent 4/	Mil. acres		Percent of base
Wheat									
1983/84	4.30	3.65		.65	2.70	95	90.2	15/5/10-30	78/78/51
1984/85	4.38	3.30		1.00	2.70	85	94.0	20/10/10-20	60/60/20
1985/86	4.38	3.30		1.08	2.70		94.0	20/10/0	73
1986/87 5/	4.38	3.00	2.40	1.98	2.00	1.10	91.0	22.5/2.5/5-10	85/85/21
1987/88	4.38	2.85	2.28	1.78			87.6	27.5/0/0	87
1988/89	4.23	2.76	2.21	1.53			84.8	27.5/0/0	83
1989/90	4.10	2.58	2.06	7/ .50				10/0/0	77
			$/cwt						
Rice									
1983/84	11.40	8.14		2.77	2.70	80	3.95	15/5/10-30	98/98/87
1984/85	11.90	8.00		3.76			4.16	25/0/0	85
1985/86	11.90	8.00	6/3.16	3.90	3.50		4.23	20/15/0	90
1986/87 5/	11.90	7.20	6/3.82	4.70			4.20	35/0/0	95
1987/88	11.66	6.84	6/5.77	4.82			4.18	35/0/0	95
1988/89	11.15	6.63	6/6.30	1.65			4.20	25/0/0	92
1989/90	10.80	6.50	6/6.50	1.29			4.10	25/0/0	94
			$/bu.						
Corn									
1983/84	2.86	2.65		0	1.50	80	82.6	10/10/10-30	71/71/60
1984/85	3.03	2.55		.43			80.8	10/0/0	54
1985/86	3.03	2.55		.48			84.2	10/0/0	69
1986/87 5/	3.03	2.40	1.92	1.11	.73		81.7	17.5/2.5/0	86
1987/88	3.03	2.28	1.82	1.09	2.00		81.5	20/15/0	90
1988/89	2.93	2.21	1.77	7/ 1.10	1.75		82.9	20/10/0; 0/92	90
1989/90	2.84	2.06	1.65	7/ .89				10/0/0; 0/92	
			$/bu.						
Sorghum									
1983/84	2.72	2.52		0	1.50	80	17.6	8/ [same]	72/72/53
1984/85	2.88	2.42		.46			18.4		42
1985/86	2.88	2.42		.46			19.3		55
1986/87 5/	2.88	2.28	1.82	1.06	.65		19.0		75
1987/88	2.88	2.17	1.74	1.14	1.90		17.4		83/42
1988/89	2.78	2.10	1.68	1.08	1.65		16.8		81
1989/90	2.70	1.96	1.57	7/ .90					
			$/bu.						
Barley									
1983/84	2.60	2.16		.21	1.00		10.2	8/ [same]	55/55/0
1984/85	2.60	2.08		.26			11.6		44
1985/86	2.60	2.08		.52			13.3		57
1986/87 5/	2.60	1.95	1.56	.99	.57		12.4		72
1987/88	2.60	1.86	1.49	.79	1.60		12.5		84
1988/89	2.51	1.80	1.44	.76	1.40		12.5		78
1989/90	2.43	1.68	1.34	7/ .23					
			$/bu.						
Oats									
1983/84	1.60	1.36		.11	.75		10.1	8/ [same]	20/20/0
1984/85	1.60	1.31		0			9.8		14
1985/86	1.60	1.31		.29			9.4		14
1986/87 5/	1.60	1.23	.99	.39	.36		9.2		37
1987/88	1.60	1.17	.94	.20	.80		8.4		45
1988/89	1.55	1.13	.90	11/ .30			7.9	5/0/0; 0/92	30
1989/90	1.50	1.06	.85					5/0/0; 0/92	
			$/bu.						
Soybeans 9/									
1983/84		5.02							
1984/85		5.02							
1985/86		5.02							
1986/87 5/		4.77							
1987/88		4.77							
1988/89		4.77							
1989/90 10/									
			Cts./lb.						
Upland cotton									
1983/84	76.0	55.00		12.10	25.00	85	15.2	20/5/10-30	93/93/77
1984/85	81.0	55.00		18.60			15.6	25/0/0	70
1985/86	81.0	57.30		23.70	30.00		15.9	20/10/0	82/0/0
1986/87 5/	81.0	55.00	11/44.00	26.00			15.6	25/0/0	93
1987/88	79.4	52.25	12/	17.3			14.7	25/0/0	92
1988/89	75.9	51.80		16.00			14.5	12.5/0/0	88
1989/90	73.4	50.00						25/0/0	

1/ Includes planted area plus acres considered planted (ARP, PLO, 0-92 etc). Net of CRP. Revised April 1989. 2/ Percentage of base acres that farmers participating in Acreage Reduction Programs/Paid Land Diversion/PIK were required to devote to conserving uses to receive program benefits. In addition to the percentages shown for 1983/84, farmers had the option of submitting bids to retire their entire base acreages. 3/ Percentage of base acres enrolled in Acreage Reduction Programs/Paid Land Diversion/PIK. 4/ Percent of program yield, except 1986/87 wheat, which is dollars per bushel. 1983 & 1984 PIK rates apply only to the 10-30 and 10-20 portions, respectively. 5/ Rates for payments received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 6/ Annual average world market price. 7/ Guaranteed to farmers signed up for 0/92. 8/ The sorghum, oats, & barley programs were the same as for corn each year except 1983/84, when PIK was not offered on barley & oats, & in 1988 for oats. 9/ There are no target prices, acreage programs, or payment rates for soybeans. 10/ Loan rate is not to be announced prior to August 1, 1989. 11/ Loan repayment rate. 12/ Loans may be repaid at the lower of the loan rate or world market prices.

Information contact: James Cole (202) 786-1840.

Table 23.—Fruit

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 F
Citrus 1/												
Production (1,000 ton)	14,255	13,329	16,484	15,105	12,057	13,608	10,792	10,525	11,051	11,968	12,728	13,113
Per capita consumpt. (lbs.) 2/	115.1	107.5	108.4	112.6	104.4	109.3	119.9	102.9	109.1	118.0	114.9	--
Noncitrus 3/												
Production (1,000 tons)	12,274	12,460	13,689	15,153	12,961	14,217	13,707	13,796	13,680	13,408	15,454	15,259
Per capita consumpt. (lbs.) 2/	84.5	83.0	85.7	87.3	88.0	89.0	88.9	93.7	92.3	95.7	101.9	--

	1988							1989				
	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
F.o.b. shipping point prices												
Apples ($/carton) 4/	14.21	23.87	23.05	20.45	13.80	12.15	12.63	10.78	13.94	12.32	11.25	9.41
Pears ($/box) 5/	17.50	--	--	--	--	12.48	12.33	9.70	10.58	10.75	9.73	13.67
Oranges ($/box) 6/	8.42	6.41	4.90	4.17	5.48	5.82	6.50	6.20	6.21	5.27	6.64	8.52
Grapefruit ($/box) 6/	3.36	4.85	4.09	7.34	7.57	4.77	4.71	3.72	3.34	3.36	3.28	4.05
Stocks, ending												
Fresh apples (mil. lbs.)	248.1	95.0	5.1	1,857.7	4,601.8	3,904.3	3,265.8	2,659.6	2,094.6	1,544.2	1,069.1	616.0
Fresh pears (mil. lbs.)	2.7	--	117.6	434.0	425.7	368.3	295.5	234.6	162.9	115.1	57.7	26.6
Frozen fruits (mil. lbs.)	657.3	864.0	981.4	997.5	1,116.0	1,011.8	937.3	834.5	759.3	671.4	601.7	575.9
Frozen orange juice (mil. lbs.)	1,154.7	1,001.8	862.5	693.1	639.7	587.7	721.6	980.9	1,151.1	1,086.8	1,204.2	1,323.6

1/ Crop year beginning with year indicated. 2/ Per capita consumption for total U.S. population, including military consumption of both fresh and processed fruit in fresh weight equivalent. 3/ Calendar year. 4/ Red delicious, Washington, extra fancy, carton tray pack, 125's. 5/ D'Anjou, Washington, standard box wrapped, U.S. no. 1, 135's. 6/ U.S. equivalent on-tree returns.
F = forecast. -- = not available.

Information contact: Ben Huang (202) 786-1885.

Table 24.—Vegetables

	Calendar year									
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Production										
Total vegetables (1,000 cwt) 1/	413,925	381,370	379,123	431,515	403,320	457,392	453,769	445,436	464,141	452,731
Fresh (1,000 cwt) 1/ 2/	190,859	190,228	194,694	207,924	197,919	217,132	217,932	216,267	219,689	225,784
Processed (tons) 3/	11,153,300	9,557,100	9,221,460	11,179,590	10,270,050	12,013,020	11,791,860	11,616,560	12,222,620	11,347,370
Mushrooms (1,000 lbs.)	470,069	469,576	517,146	490,826	561,531	595,681	587,956	614,393	631,690	--
Potatoes (1,000 cwt)	342,447	302,857	338,591	355,131	333,911	362,612	407,109	361,511	385,462	349,973
Sweetpotatoes (1,000 cwt)	13,370	10,953	12,799	14,833	12,083	12,986	14,853	12,674	12,064	11,832
Dry edible beans (1,000 cwt)	20,552	26,729	32,751	25,563	15,520	21,070	22,175	22,886	25,909	19,230

	1988								1989				
	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Shipments													
Fresh (1,000 cwt) 4/	26,488	36,998	21,631	21,791	15,215	16,475	20,999	16,535	18,041	18,754	24,944	20,887	27,972
Potatoes (1,000 cwt)	12,356	12,791	7,461	10,014	9,963	9,958	13,948	11,092	11,137	10,497	14,733	13,005	12,005
Sweetpotatoes (1,000 cwt)	174	127	91	212	262	305	876	460	246	278	441	229	170

1/ 1983 data are not comparable with 1984 & 1985. 2/ Estimate reinstated for asparagus with the 1984 crop; all other years also include broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes. 3/ Estimates reinstated for cucumbers with the 1984 crop; all other years also include snap beans, sweet corn, green peas, & tomatoes. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, & watermelons. -- = not available.

Information contacts: Shannon Hamm or Cathy Greene (202) 786-1884.

Table 25.—Other Commodities

	Annual					1988				1989
	1984	1985	1986	1987	1988	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Jan-Mar
Sugar										
Production 1/	5,890	5,969	6,257	7,309	7,069	2,082	772	642	3,573	1,835
Deliveries 1/	8,454	8,035	7,786	8,167	8,188	1,951	1,983	2,147	2,107	1,902
Stocks, ending 1/	3,005	3,126	3,225	3,195	3,117	3,567	2,467	1,316	3,134	3,413
Coffee										
Composite green price N.Y. (cts./lb.)	142.95	137.46	185.18	109.14	115.59	121.98	121.44	114.20	120.75	126.67
Imports, green bean equiv. (mil. lbs.) 2/	2,411	2,550	2,596	2,638	2,072	584	422	594	472	586

	Annual			1988				1989		
	1986	1987	1988	Mar	Oct	Nov	Dec	Jan	Feb	Mar
Tobacco										
Prices at auctions 3/										
Flue-cured ($/lb.)	1.52	1.59	1.61	--	1.71	1.61	--	--	--	--
Burley ($/lb.)	1.57	1.56	1.62	--	NQ	1.63	1.62	1.60	1.54	--
Domestic consumption 4/										
Cigarettes (bil.)	584.0	577.0	543.3	55.3	46.9	56.3	39.5	46.9	41.9	51.7
Large cigars (mil.)	3,090	2,760	2,541	223.9	217.4	209.7	203.3	169.3	171.4	217.6

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green & processed coffee. 3/ Crop year July-June for flue-cured, Oct.-Sept. for burley. 4/ Taxable removals. P = preliminary.
-- = not available. NQ = no quote.

Information contacts: sugar, Peter Buzzanell (202) 786-1888, coffee, Fred Gray (202) 786-1888, tobacco, Verner Grise (202) 786-1890.

Table 26.—World Supply & Utilization of Major Crops, Livestock, & Products

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89 P	1989/90 F
				Million units			
Wheat							
Area (hectares)	228.8	231.0	229.3	228.1	219.9	217.9	227.5
Production (metric tons)	489.3	511.9	500.1	530.7	501.8	500.2	533.4
Exports (metric tons) 1/	102.0	107.0	85.0	90.7	105.5	98.8	99.0
Consumption (metric tons) 2/	474.1	493.0	496.2	522.4	531.6	530.0	538.1
Ending stocks (metric tons) 3/	145.2	164.0	167.9	176.1	146.3	116.5	111.8
Coarse grains							
Area (hectares)	335.1	334.7	341.2	336.8	323.6	327.2	
Production (metric tons)	687.6	815.8	843.3	835.2	792.1	728.2	809.4
Exports (metric tons) 1/	93.4	100.4	83.2	84.1	83.1	97.0	94.9
Consumption (metric tons) 2/	758.8	782.6	779.1	809.5	812.8	799.7	817.0
Ending stocks (metric tons) 3/	110.7	143.9	208.1	233.8	213.1	141.6	134.0
Rice, milled							
Area (hectares)	144.2	144.3	144.9	145.1	141.0	143.8	
Production (metric tons)	307.9	318.8	320.0	318.3	312.6	324.4	328.2
Exports (metric tons) 4/	12.6	11.4	12.6	12.8	11.8	13.4	12.7
Consumption (metric tons) 2/	304.5	310.6	319.7	323.1	320.5	322.8	328.7
Ending stocks (metric tons) 3/	46.6	54.9	54.0	49.2	41.4	42.9	42.4
Total grains							
Area (hectares)	708.1	710.0	715.4	710.0	684.5	688.9	227.5
Production (metric tons)	1,484.8	1,646.5	1,663.4	1,684.2	1,606.5	1,552.8	1,671.0
Exports (metric tons) 1/	208.0	218.8	180.8	187.6	200.4	209.2	206.6
Consumption (metric tons) 2/	1,537.4	1,586.2	1,595.0	1,655.0	1,664.9	1,652.5	1,683.8
Ending stocks (metric tons) 3/	302.5	362.8	430.0	459.1	400.8	301.0	288.2
Oilseeds							
Crush (metric tons)	135.8	150.7	155.1	161.3	166.9	165.6	172.6
Production (metric tons)	165.0	191.1	196.1	194.2	208.0	199.1	215.4
Exports (metric tons)	33.0	33.1	34.5	37.7	39.5	32.3	34.7
Ending stocks (metric tons)	15.7	21.1	26.8	23.5	23.9	19.0	21.2
Meals							
Production (metric tons)	92.5	101.8	105.0	110.3	114.2	112.1	117.5
Exports (metric tons)	29.7	32.3	34.4	36.7	36.3	36.8	38.8
Oils							
Production (metric tons)	42.1	46.2	49.3	50.3	52.7	52.9	55.5
Exports (metric tons)	13.7	15.6	16.4	16.9	17.5	17.3	18.2
Cotton							
Area (hectares)	31.0	33.9	31.9	29.9	31.1	34.0	
Production (bales)	65.6	88.2	79.6	70.4	80.8	84.0	80.8
Exports (bales)	19.2	20.2	20.2	26.0	23.2	24.7	24.8
Consumption (bales)	68.3	70.0	75.8	82.5	84.0	83.6	84.8
Ending stocks (bales)	24.0	42.4	47.2	34.5	30.9	31.7	27.7
	1983	1984	1985	1986	1987	1988	1989 F
Red meat							
Production (metric tons)	97.5	99.6	103.5	106.4	108.8	109.9	110.6
Consumption (metric tons)	95.8	97.6	101.5	105.3	107.1	108.6	109.2
Exports (metric tons) 1/	5.9	5.9	6.2	6.6	6.6	6.7	6.9
Poultry							
Production (metric tons)	24.4	25.2	26.2	27.4	29.2	30.1	31.3
Consumption (metric tons)	24.3	24.8	26.0	27.0	28.8	29.7	30.8
Exports (metric tons) 1/	1.3	1.3	1.2	1.3	1.5	1.5	1.6
Dairy							
Milk production (metric tons)	413.0	413.5	419.1	427.0	427.0	430.5	433.9

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years & do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1984 data correspond with 1983/84, etc. P = preliminary. F = forecast.

Information contacts: Frederic Surls (202) 786-1824; red meat & poultry, Linda Bailey (202) 786-1286; dairy, Sara Short (202) 786-1769.

Table 27.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1988		1989				
	1986	1987	1988	May	Dec	Jan	Feb	Mar	Apr	May
Export commodities										
Wheat, f.o.b. vessel, Gulf ports ($/bu.)	3.19	3.11	3.97	3.54	4.55	4.75	4.70	4.88	4.79	4.82
Corn, f.o.b. vessel, Gulf ports ($/bu.)	2.27	1.95	2.73	2.28	3.00	3.03	3.00	3.03	2.95	3.02
Grain sorghum, f.o.b. vessel, Gulf ports ($/bu.)	2.16	1.88	2.52	2.12	2.79	2.81	2.81	2.83	2.76	2.84
Soybeans, f.o.b. vessel, Gulf ports ($/bu.)	5.45	5.55	7.81	7.38	8.07	8.09	7.89	8.05	7.61	7.61
Soybean oil, Decatur (cts./lb.)	16.36	15.85	23.52	23.39	21.75	20.98	21.02	22.02	21.88	22.23
Soybean meal, Decatur ($/ton)	157.62	175.57	234.75	224.40	246.48	248.76	234.18	235.70	220.90	215.09
Cotton, 8-market avg. spot (cts./lb.)	53.47	64.35	57.25	61.55	54.85	55.67	55.39	57.60	61.43	63.70
Tobacco, avg. price at auction (cts./lb.)	153.96	144.32	147.93	141.34	161.00	162.27	159.74	159.74	160.43	160.43
Rice, f.o.b. mill, Houston ($/cwt)	14.60	13.15	19.60	21.20	15.00	15.00	15.00	15.00	15.00	15.00
Inedible tallow, Chicago (cts./lb.)	9.03	13.79	16.64	16.17	16.33	14.90	16.00	14.86	14.60	14.70
Import commodities										
Coffee, N.Y. spot ($/lb.)	2.01	1.09	1.21	1.22	1.31	1.46	1.31	1.28	1.33	1.36
Rubber, N.Y. spot (cts./lb.)	42.87	50.65	59.20	58.62	54.13	55.95	59.34	56.69	55.23	52.07
Cocoa beans, N.Y. ($/lb.)	.88	.87	.69	.74	.66	.64	.68	.64	.58	.54

Information contact: Mary Teymourian (202) 786-1820.

Table 28.—Indexes of Real Trade-Weighted Dollar Exchange Rates [1]

	1988						1989					
	July	Aug	Sept	Oct	Nov	Dec	Jan P	Feb P	Mar P	Apr P	May P	June P
	1980=100											
Total U.S. trade 2/	108.4	110.5	110.5	107.6	103.5	103.3	106.9	107.9	109.2	109.5	114.0	115.5
Agricultural trade												
U.S. markets	105.5	106.1	107.4	104.8	101.9	101.5	103.2	103.4	103.5	102.9	104.6	105.8
U.S. competitors	126.6	128.1	128.1	126.3	123.8	123.0	123.8	124.6	121.5	118.5	117.5	118.1
Wheat												
U.S. markets	115.5	115.7	118.8	116.5	114.6	114.6	117.1	116.9	113.8	110.7	109.7	109.3
U.S. competitors	119.7	120.7	119.7	116.6	114.2	112.6	113.3	113.9	115.4	115.3	117.6	118.9
Soybeans												
U.S. markets	103.3	104.5	104.5	101.9	98.1	97.9	100.6	101.1	102.0	102.1	105.1	107.2
U.S. competitors	186.3	185.9	174.7	169.2	167.5	164.7	162.6	161.3	153.8	139.9	129.6	128.0
Corn												
U.S. markets	93.4	93.6	94.1	91.4	88.2	87.6	89.0	89.1	89.6	89.3	90.9	93.1
U.S. competitors	170.7	171.6	164.8	159.3	155.0	153.6	156.8	157.8	158.2	158.3	161.4	163.3
Cotton												
U.S. markets	101.3	101.8	102.1	100.0	96.9	96.4	97.9	97.9	98.4	98.3	99.8	100.9
U.S. competitors	100.7	99.5	101.8	99.1	97.1	95.8	95.2	94.2	95.2	93.0	91.9	96.4

1/ Real indexes adjust nominal exchange rates for differences in rates of inflation, to avoid the distortion caused by high-inflation countries. A higher value means the dollar has appreciated. See the October 1988 issue of Agricultural Outlook for a discussion of the calculations and the weights used. 2/ Federal Reserve Board index of trade-weighted value of the U.S. dollar against 10 major currencies. Weights are based on relative importance in world financial markets.
P = preliminary.

Information contact: Tim Baxter, David Stallings (202) 786-1706.

Table 29.—Trade Balance

	Fiscal year 1/									Apr
	1981	1982	1983	1984	1985	1986	1987	1988	1989 F	1989
	$ million									
Exports										
Agricultural	43,780	39,097	34,769	38,027	31,201	26,309	27,876	35,334	39,000	3,433
Nonagricultural	185,423	176,308	159,373	170,014	179,236	176,628	202,911	259,013	--	27,566
Total 2/	229,203	215,405	194,142	208,041	210,437	202,937	230,787	294,347	--	30,999
Imports										
Agricultural	17,218	15,485	16,373	18,916	19,740	20,875	20,650	21,011	21,000	1,833
Nonagricultural	237,469	233,349	230,527	297,736	313,722	342,855	367,374	409,141	--	36,391
Total 3/	254,687	248,834	246,900	316,652	333,462	363,730	388,024	430,152	--	38,224
Trade balance										
Agricultural	26,562	23,612	18,396	19,111	11,461	5,434	7,226	14,323	18,000	1,600
Nonagricultural	-52,046	-57,041	-71,154	-127,722	-134,486	-166,227	-164,463	-150,128	--	-8,825
Total	-25,484	-33,429	-52,758	-108,611	-123,025	-160,793	-157,237	-135,805	--	-7,225

1/ Fiscal years begin October 1 & end September 30. Fiscal year 1988 began Oct. 1, 1987 & ended Sept. 30, 1988.
2/ Domestic exports including Department of Defense shipments (F.A.S. value). 3/ Imports for consumption (customs value).
F = forecast. -- = not available.

Information contact: Stephen MacDonald (202) 786-1822.

Table 30.—U.S. Agricultural Exports & Imports

	Fiscal year*				Apr	Fiscal year*				Apr
	1986	1987	1988	1989 F	1989	1986	1987	1988	1989 F	1989
	1,000 units					$ million				
EXPORTS										
Animals, live (no.) 1/	570	275	1,082	--	64	344	331	452	--	20
Meats & preps., excl. poultry (mt)	451	548	631	2/600	72	1,012	1,300	1,797	--	207
Dairy products (mt)	480	445	388	--	56	431	491	536	500	34
Poultry meats (mt)	265	376	390	400	41	282	406	424	--	43
Fats, oils, & greases (mt)	1,355	1,220	1,362	3/1,400	121	477	417	545	--	45
Hides & skins incl. furskins	--	--	--	--	--	1,440	1,666	1,838	--	144
Cattle hides, whole (no.) 1/	25,596	24,333	23,282	--	2,321	1,131	1,254	1,457	--	116
Mink pelts (no.) 1/	2,697	2,760	2,455	--	336	65	103	88	--	10
Grains & feeds (mt)	74,358	90,211	108,905	--	9,973	9,472	9,059	12,581	4/16,300	1,463
Wheat (mt)	25,501	28,204	40,501	37,000	3,154	3,260	2,877	4,467	5/6,200	515
Wheat flour (mt)	1,094	1,305	1,046	1,300	128	203	207	171	--	27
Rice (mt)	2,382	2,454	2,173	2,400	212	648	551	731	800	66
Feed grains, incl. products (mt)	36,236	47,606	53,308	62,500	5,571	3,817	3,752	5,209	7,500	684
Feeds & fodders (mt)	8,392	10,113	11,233	6/11,000	847	1,286	1,455	1,719	--	139
Other grain products (mt)	1,015	755	908	--	99	332	285	361	--	44
Fruits, nuts, and preps. (mt)	2,003	2,146	2,409	--	243	1,766	2,050	2,368	--	192
Fruit juices incl. froz. (1,000 hectoliters) 1/	3,652	4,364	5,497	--	416	148	185	252	--	24
Vegetables & preps. (mt)	1,442	1,629	1,826	--	241	997	1,176	1,282	--	143
Tobacco, unmanufactured (mt)	224	224	229	200	20	1,318	1,203	1,296	1,300	121
Cotton, excl. linters (mt)	482	1,306	1,388	1,400	137	678	1,419	2,136	2,000	185
Seeds (mt)	269	305	286	--	29	367	371	415	400	33
Sugar, cane or beet (mt)	375	582	318	--	28	75	113	98	--	10
Oilseeds & products (mt)	27,583	29,725	29,471	--	1,864	6,271	6,308	7,700	6,800	568
Oilseeds (mt)	20,684	21,905	21,366	--	1,193	4,394	4,423	5,238	--	348
Soybeans (mt)	20,139	21,394	20,908	15,400	1,111	4,174	4,205	5,008	4,300	314
Protein meal (mt)	5,614	6,786	6,406	4,500	563	1,132	1,347	1,502	1,300	156
Vegetable oils (mt)	1,284	1,035	1,699	--	108	746	538	961	--	64
Essential oils (mt)	7	8	9	--	1	105	111	120	--	18
Other	568	565	668	--	57	1,126	1,273	1,495	--	181
Total	109,862	129,290	148,280	146,500	12,883	26,309	27,876	35,334	39,000	3,433
IMPORTS										
Animals, live (no.) 1/	1,885	1,994	2,238	--	225	637	610	729	700	69
Meats & preps., excl. poultry (mt)	1,139	1,282	1,280	--	91	2,248	2,797	2,788	--	195
Beef & veal (mt)	693	778	779	725	54	1,252	1,575	1,681	1,600	124
Pork (mt)	406	462	456	410	32	900	1,125	1,001	900	61
Dairy products (mt)	400	461	337	355	22	786	849	881	800	54
Poultry & products 1/	--	--	--	--	--	101	112	97	--	10
Fats, oils, & greases (mt)	22	21	20	--	1	17	18	19	--	1
Hides & skins, incl. furskins 1/	--	--	--	--	--	200	304	247	--	17
Wool, unmanufactured (mt)	53	60	56	--	8	160	201	292	--	42
Grains & feeds (mt)	2,311	2,336	3,050	3,300	269	668	727	868	1,000	96
Fruits, nuts, & preps., excl. juices (mt)	4,637	4,840	4,797	4,795	543	1,976	2,179	2,169	--	232
Bananas & plantains (mt)	3,042	3,106	3,030	2,950	228	740	817	820	800	62
Fruit juices (1,000 hectoliters) 1/	31,539	34,059	26,754	27,000	2,343	698	728	767	--	64
Vegetables & preps. (mt)	2,199	2,446	2,521	2,550	299	1,560	1,509	1,593	1,700	200
Tobacco, unmanufactured (mt)	208	225	217	200	19	606	634	611	500	54
Cotton, unmanufactured (mt)	41	38	36	--	1	14	7	9	--	1
Seeds (mt)	89	133	143	170	36	111	156	153	200	28
Nursery stock & cut flowers 1/	--	--	--	--	--	353	369	419	--	35
Sugar, cane or beet (mt)	1,905	1,492	1,069	--	84	654	497	368	--	30
Oilseeds & products (mt)	1,508	1,572	1,772	1,865	89	639	579	838	900	45
Oilseeds (mt)	197	165	208	--	16	69	56	71	--	7
Protein meal (mt)	138	245	253	--	31	15	30	42	--	5
Vegetable oils (mt)	1,173	1,162	1,311	--	42	555	493	725	--	33
Beverages excl. fruit juices (1,000 hectoliters) 1/	15,488	15,547	15,583	--	1,084	1,848	1,923	2,008	--	139
Coffee, tea, cocoa, spices (mt)	1,940	1,915	1,842	--	161	6,099	4,868	4,274	--	332
Coffee, incl. products (mt)	1,223	1,206	1,050	1,000	89	4,400	3,233	2,600	2,800	202
Cocoa beans & products (mt)	507	503	562	530	53	1,189	1,087	1,164	1,000	90
Rubber & allied gums (mt)	801	824	846	875	76	615	714	949	1,000	89
Other	--	--	--	--	--	885	868	931	--	100
Total	--	--	--	--	--	20,875	20,650	21,011	21,000	1,833

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1988 began Oct. 1, 1987 & ended Sept. 30, 1988. 1/ Not included in total volume. 2/ Forecasts for footnoted items 2/-6/ are based on slightly different groups of commodities. Fiscal 1988 exports of categories used in the 1989 forecasts were 2/ 561,000 m. tons. 3/ 1.347 million dollars 4/ 12,743 million. 5/ 4,638 million. i.e. includes flour. 6/ 11.095 million m. tons. F = forecast. -- = not available.

Information contact: Stephen MacDonald (202) 786-1822.

Table 31.—U.S. Agricultural Exports by Region

Region & country	Fiscal year*				Apr	Change from year* earlier				Apr
	1986	1987	1988	1989 F	1989	1986	1987	1988	1989 F	1989
	$ million					Percent				
Western Europe	6,848	7,219	8,029	7,400	497	-5	5	11	-7	-22
European Community (EC-12)	6,432	6,787	7,513	6,900	464	-4	5	11	-8	-22
Belgium-Luxembourg	361	423	429	--	28	-23	17	1	--	2
France	431	495	565	--	32	9	15	14	--	-6
Germany, Fed. Rep.	1,001	1,266	1,306	--	88	11	26	3	--	-4
Italy	693	733	713	--	40	2	6	-3	--	-61
Netherlands	2,042	1,954	2,087	--	148	6	-4	7	--	-11
United Kingdom	628	666	819	--	40	0	6	23	--	-33
Portugal	308	271	340	--	27	-39	-12	25	--	63
Spain, incl. Canary Islands	723	658	848	--	44	-13	-9	29	--	-37
Other Western Europe	415	432	516	500	33	-19	4	20	0	-27
Switzerland	128	145	191	--	16	-45	13	32	--	15
Eastern Europe	447	453	559	400	62	-16	1	23	-33	-25
German Dem. Rep.	52	66	67	--	12	-36	27	0	--	2,634
Poland	42	63	167	--	6	-66	50	165	--	-79
Yugoslavia	134	131	104	--	2	-2	-2	-21	--	-93
Romania	112	115	93	--	8	27	3	-19	--	-22
USSR	1,105	659	1,934	3,400	449	-56	-40	193	79	47
Asia	10,494	11,990	15,928	18,400	1,607	-12	14	33	16	22
West Asia (Mideast)	1,243	1,664	1,903	2,100	161	-14	34	14	11	15
Turkey	111	117	120	--	8	-13	5	3	--	-35
Iraq	335	528	735	900	66	-10	58	39	29	12
Israel	255	244	334	--	26	-15	-4	37	--	-6
Saudi Arabia	335	489	464	400	28	-12	46	-5	-13	22
South Asia	517	345	805	--	102	-14	-33	133	--	206
Bangladesh	94	111	107	--	42	-54	18	-3	--	1,604
India	90	93	354	--	8	-30	3	281	--	-30
Pakistan	285	98	276	500	43	25	-66	181	67	124
China	83	235	613	1,400	98	-65	183	161	133	35
Japan	5,139	5,554	7,274	7,900	739	-9	8	31	8	20
Southeast Asia	724	708	1,015	--	70	-14	-2	43	--	-17
Indonesia	172	152	238	--	14	-16	-12	56	--	-33
Philippines	269	259	345	400	24	-6	-4	33	33	-2
Other East Asia	2,788	3,485	4,318	4,700	437	-11	25	24	9	19
Taiwan	1,109	1,354	1,577	1,600	141	-17	22	16	0	14
Korea, Rep.	1,277	1,693	2,250	2,500	246	-9	33	33	11	21
Hong Kong	400	436	488	600	51	1	9	12	20	24
Africa	2,134	1,784	2,272	2,400	149	-16	-16	27	6	-30
North Africa	1,401	1,279	1,659	1,800	126	16	-9	30	8	-19
Morocco	159	196	193	--	2	2	23	-2	--	-92
Algeria	329	244	537	700	53	50	-26	120	30	-7
Egypt	875	761	786	900	64	14	-13	3	15	4
Sub-Sahara	733	505	613	600	23	-44	-31	21	0	-60
Nigeria	158	67	44	--	1	-57	-58	-35	--	12
Rep. S. Africa	70	49	85	--	2	-63	-30	74	--	-30
Latin America & Caribbean	3,598	3,765	4,401	4,800	449	-21	5	17	9	35
Brazil	445	418	176	100	5	-20	-6	-58	-50	-10
Caribbean Islands	752	829	867	--	91	-2	10	5	--	30
Central America	334	377	413	--	42	-7	13	10	--	46
Colombia	137	115	178	--	15	-42	-16	55	--	-37
Mexico	1,114	1,215	1,726	2,100	234	-29	9	42	24	86
Peru	108	140	174	--	1	2	30	24	--	-87
Venezuela	493	459	597	600	43	-32	-7	30	0	-24
Canada	1,466	1,776	1,973	2,000	195	-15	21	11	0	24
Oceania	216	230	238	200	22	6	6	3	0	29
Total	26,309	27,876	35,334	39,000	3,433	-16	6	27	10	12
Developed countries	13,954	15,031	17,883	17,900	1,476	-8	8	19	0	1
Less developed countries	10,719	11,498	14,346	15,900	1,347	-15	7	25	11	18
Centrally planned countries	1,636	1,347	3,106	5,200	610	-50	-18	131	68	32

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1988 began Oct. 1, 1987 & ended Sept. 30, 1988. F = forecast.
-- = not available.
Note: Adjusted for transshipments through Canada.

Information contact: Stephen MacDonald (202) 786-1822.

Table 32.—Farm Income Statistics

	Calendar Year										
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 F	1989 F
	$ billion										
1. Farm receipts	133.8	142.0	144.1	147.1	141.1	146.8	149.1	140.2	143.7	157	161 to 170
Crops (incl. net CCC loans)	62.3	71.7	72.5	72.3	67.1	69.5	74.2	63.6	61.9	72	72 to 76
Livestock	69.2	68.0	69.2	70.3	69.4	73.0	69.8	71.5	76.2	78	79 to 82
Farm related 1/	2.2	2.3	2.5	4.5	4.5	4.4	5.0	5.1	5.6	6	5 to 7
2. Direct Government payments	1.4	1.3	1.9	3.5	9.3	8.4	7.7	11.8	16.8	14	10 to 12
Cash payments	1.4	1.3	1.9	3.5	4.1	4.0	7.6	8.1	6.7	8	7 to 11
Value of PIK commodities	0.0	0.0	0.0	0.0	5.2	4.5	0.1	3.7	10.1	7	1 to 2
3. Total gross farm income (4+5+6) 2/	150.7	149.3	166.4	163.5	153.1	174.9	166.1	159.8	169.8	177	185 to 190
4. Gross cash income (1+2)	135.1	143.3	146.0	150.6	150.4	155.2	156.7	152.0	160.5	170	168 to 173
5. Nonmoney income 3/	10.6	12.3	13.8	14.3	13.5	13.4	11.8	10.6	10.0	11	8 to 10
6. Value of inventory change	5.0	-6.3	6.5	-1.4	-10.9	6.3	-2.4	-2.8	-.6	-4	4 to 7
7. Cash expenses 4/	101.7	109.1	113.2	112.8	113.5	116.6	110.2	100.6	103.3	113	115 to 119
8. Total expenses	123.3	133.1	139.4	140.0	140.4	142.7	134.0	122.3	123.5	133	136 to 140
9. Net cash income (4-7)	33.4	34.2	32.8	37.8	36.9	38.7	46.6	51.4	57.1	58	50 to 55
10. Net farm income (3-8)	27.4	16.1	26.9	23.5	12.7	32.3	32.2	37.4	46.3	44	47 to 52
Deflated (1982$)	34.9	18.8	28.6	23.5	12.2	30.0	28.9	32.8	39.5	36	39 to 43
11. Off-farm income	33.8	34.7	35.8	36.4	37.0	38.9	42.6	44.6	46.8	49	48 to 51
12. Loan changes 5/: Real estate	13.0	9.9	9.1	3.8	2.3	-1.1	-6.0	-9.2	-7.7	-5	0 to 3
13. 5/: Non-real estate	11.2	5.3	6.5	3.4	0.9	-0.8	-9.6	-10.7	-4.9	1	2 to 3
14. Rental income plus monetary change	6.3	6.1	6.4	6.3	5.3	8.9	8.8	7.8	6.8	9	7 to 9
15. Capital expenditures 5/	20.1	18.0	16.8	13.3	12.7	12.5	9.6	8.6	9.8	11	10 to 12
16. Net cash flow (9+12+13+14-15)	43.8	37.6	37.8	38.1	32.7	33.2	30.2	30.7	41.5	53	50 to 56

1/ Income from machine hire, custom work, sales of forest products, & other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food & imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, & farm household expenses. 5/ Excludes farm households. Totals may not add because of rounding. F = forecast.

Information contact: Andy Bernat (202) 786-1808.

Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar year 1/										
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988 F	1989 F
	$ billion										
Assets											
Real estate	706.2	782.9	784.7	748.8	739.6	639.6	558.6	510.1	522.6	551	587 to 597
Non-real estate	201.6	213.2	212.0	212.4	205.7	208.9	190.4	181.5	186.6	200	196 to 202
Livestock & poultry	61.4	60.6	53.5	53.0	49.7	49.6	46.3	47.6	57.9	66	65 to 69
Machinery & motor vehicles	85.8	93.1	101.4	102.0	100.8	96.9	87.6	80.3	73.9	74	74 to 78
Crops stored 2/	29.2	33.0	29.1	27.9	23.9	29.6	23.5	19.1	20.5	25	18 to 22
Financial assets	25.3	26.5	28.0	29.5	31.3	32.8	33.0	34.4	34.3	35	35 to 37
Total farm assets	907.8	996.1	996.7	961.2	945.3	848.5	749.0	691.6	709.2	751	785 to 795
Liabilities											
Real estate debt 3/	79.7	89.6	98.7	102.5	104.8	103.7	97.7	88.5	80.8	76	75 to 79
Non-real estate debt 4/	71.8	77.1	83.6	87.0	87.9	87.1	77.5	66.8	61.9	62	60 to 64
Total farm debt	151.6	166.8	182.3	189.5	192.7	190.8	175.2	155.3	142.7	138	134 to 142
Total farm equity	756.2	829.3	814.4	771.7	752.6	657.7	573.8	536.3	566.5	613	648 to 658
	Percent										
Selected ratios											
Debt-to-assets	16.7	16.7	18.3	19.7	20.4	22.5	23.4	22.5	20.1	18.4	17 to 18
Debt-to-equity	20.0	20.1	22.4	24.6	25.6	29.0	30.5	29.0	25.2	22.5	21 to 22
Debt-to-net cash income	454	488	556	497	523	493	376	302	250	236	254 to 264

1/ As of Dec. 31. 2/ Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3/ Excludes debt on operator dwellings, but includes CCC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. F = forecast.

Information contacts: Ken Erickson or Jim Ryan (202) 786-1798.

Table 34.—Cash Receipts from Farm Marketings, by State

Region & State	Livestock & products				Crops 1/				Total 1/			
	1987	1988	Mar 1989	Apr 1989	1987	1988	Mar 1989	Apr 1989	1987	1988	Mar 1989	Apr 1989
						$ million 2/						
North Atlantic												
Maine	243	216	20	19	170	212	37	38	413	428	57	56
New Hampshire	66	60	5	5	38	77	7	7	104	137	12	12
Vermont	377	352	32	29	35	53	4	4	412	405	35	33
Massachusetts	124	105	9	9	268	298	16	20	393	403	25	29
Rhode Island	12	13	1	1	63	66	4	6	75	79	6	7
Connecticut	196	180	16	14	170	202	17	21	366	382	32	35
New York	1,800	1,781	159	152	726	847	57	60	2,527	2,628	216	212
New Jersey	140	192	16	16	423	451	28	39	563	643	45	55
Pennsylvania	2,319	2,348	229	215	905	939	86	82	3,224	3,287	315	297
North Central												
Ohio	1,614	1,604	143	143	1,808	2,030	105	96	3,422	3,634	248	239
Indiana	1,856	1,749	153	153	2,016	2,368	150	108	3,872	4,118	303	260
Illinois	2,262	2,243	164	167	3,913	4,216	297	279	6,174	6,459	462	446
Michigan	1,285	1,206	109	108	1,219	1,503	98	105	2,504	2,709	206	213
Wisconsin	4,222	4,281	364	354	795	814	55	50	5,017	5,095	418	404
Minnesota	3,645	3,364	290	278	2,165	2,852	177	171	5,809	6,217	467	448
Iowa	5,270	5,045	400	397	3,510	4,029	270	242	8,780	9,074	669	639
Missouri	2,173	2,011	177	163	1,517	1,821	112	73	3,691	3,833	288	236
North Dakota	760	849	85	69	1,548	1,621	107	87	2,308	2,471	193	156
South Dakota	1,910	1,965	142	131	813	946	51	38	2,723	2,911	194	169
Nebraska	4,848	5,336	458	423	1,975	2,639	205	162	6,823	7,975	663	585
Kansas	3,914	4,264	387	374	1,807	2,328	114	98	5,722	6,593	501	471
Southern												
Delaware	370	444	42	43	114	154	7	9	485	598	49	52
Maryland	734	768	72	72	394	458	28	65	1,128	1,226	99	137
Virginia	1,244	1,294	108	137	448	595	25	21	1,692	1,889	133	158
West Virginia	169	179	15	16	52	70	4	3	221	248	19	19
North Carolina	2,081	2,174	210	202	1,634	1,999	55	61	3,715	4,172	265	262
South Carolina	461	488	42	45	470	590	18	17	931	1,078	60	62
Georgia	1,826	2,011	164	186	1,261	1,553	62	66	3,087	3,564	227	252
Florida	1,102	1,114	97	101	4,125	4,589	423	715	5,227	5,703	520	816
Kentucky	1,506	1,538	101	84	913	992	40	30	2,419	2,530	141	114
Tennessee	1,107	1,080	104	85	826	965	38	39	1,933	2,046	141	124
Alabama	1,560	1,695	173	160	588	697	33	39	2,148	2,391	206	198
Mississippi	1,040	1,176	109	105	939	1,170	18	40	1,979	2,346	127	146
Arkansas	2,116	2,278	215	201	1,027	1,691	51	37	3,143	3,969	266	238
Louisiana	521	577	46	45	899	1,320	22	27	1,420	1,897	68	72
Oklahoma	2,052	2,284	187	195	700	1,118	44	52	2,752	3,402	231	247
Texas	6,059	6,498	473	475	3,027	3,817	196	221	9,086	10,315	669	696
Western												
Montana	760	816	72	54	587	572	41	38	1,347	1,389	112	92
Idaho	926	1,033	102	102	1,120	1,343	98	126	2,047	2,376	201	228
Wyoming	528	575	37	41	114	155	11	9	642	730	48	50
Colorado	2,321	2,655	217	201	870	1,089	130	106	3,191	3,744	347	307
New Mexico	817	910	120	79	331	366	22	22	1,147	1,276	142	100
Arizona	774	793	77	63	1,007	1,165	132	61	1,781	1,958	209	124
Utah	462	537	38	50	134	150	12	12	596	687	50	61
Nevada	167	150	13	13	76	80	10	7	243	230	23	20
Washington	982	1,141	109	98	1,860	2,156	136	163	2,841	3,297	245	261
Oregon	655	669	61	55	1,206	1,441	72	84	1,861	2,110	133	139
California	4,741	4,704	450	505	10,781	11,304	651	773	15,522	16,007	1,101	1,278
Alaska	11	10	1	1	19	20	1	1	29	30	2	2
Hawaii	88	89	8	7	471	500	42	41	559	588	50	48
United States	76,218	78,845	6,822	6,639	61,876	72,431	4,417	4,669	138,094	151,276	11,238	11,308

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period. 2/ Estimates as of end of current month. Totals may not add because of rounding.

Information contact: Roger Strickland (202) 786-1804.

Table 35.—Cash Receipts from Farming

	Annual						1988		1989			
	1983	1984	1985	1986	1987	1988	Apr	Dec	Jan	Feb	Mar	Apr
	$ million											
Farm marketings & CCC loans*	136,567	142,436	144,015	135,102	138,094	151,276	10,275	13,176	14,055	11,501	11,238	11,308
Livestock & products	69,438	72,966	69,842	71,548	76,218	78,845	6,186	6,237	7,124	6,682	6,822	6,639
Meat animals	38,893	40,832	38,589	39,122	44,716	45,974	3,768	3,404	4,235	4,108	3,862	3,765
Dairy products	18,763	17,944	18,063	17,753	17,829	17,668	1,451	1,639	1,611	1,435	1,568	1,559
Poultry & eggs	9,981	12,223	11,211	12,678	11,487	12,865	807	1,045	1,106	1,001	1,233	1,158
Other	1,801	1,967	1,979	1,994	2,187	2,338	160	150	172	138	158	158
Crops	67,129	69,469	74,173	63,554	61,876	72,431	4,089	6,939	6,932	4,819	4,417	4,669
Food grains	9,713	9,740	8,993	5,631	5,411	7,679	243	572	604	345	292	312
Feed crops	15,535	15,668	22,520	16,982	13,061	15,287	712	1,334	1,426	1,262	1,104	964
Cotton (lint & seed)	3,705	3,674	3,687	3,551	4,027	4,667	107	1,165	750	537	65	134
Tobacco	2,752	2,813	2,722	1,918	1,827	2,039	23	211	385	17	0	30
Oil-bearing crops	13,546	13,641	12,474	10,592	10,800	13,700	596	937	1,478	714	731	515
Vegetables & melons	8,459	9,138	8,558	8,630	9,223	9,785	852	556	1,050	788	1,061	1,243
Fruits & tree nuts	6,056	6,737	6,843	7,288	7,869	8,674	422	951	555	490	258	334
Other	7,365	8,060	8,378	8,962	9,658	10,599	1,135	1,212	684	666	906	1,137
Government payments	9,295	8,430	7,704	11,813	16,747	14,480	1,879	468	331	2,208	1,103	902
Total	145,862	150,866	151,719	146,915	154,841	165,756	12,154	13,644	14,386	13,709	12,341	12,210

*Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information contact: Roger Strickland (202) 786-1804.

Table 36.—Farm Production Expenses

	Calendar year									
	1980	1981	1982	1983	1984	1985	1986	1987	1988 F	1989 F
	$ million									
Feed	20,971	20,855	18,592	21,725	19,852	18,015	16,179	16,093	20,600	20,000 to 24,000
Livestock	10,670	8,999	9,684	8,814	9,498	8,958	9,744	12,014	13,200	11,000 to 14,000
Seed	3,220	3,428	3,172	2,993	3,448	3,350	2,984	3,009	3,000	3,000 to 4,000
Farm-origin inputs	34,861	33,282	31,448	33,532	32,798	30,323	28,907	31,116	36,900	36,000 to 40,000
Fertilizer	9,491	9,409	8,018	7,067	7,429	7,259	5,787	5,392	5,900	6,000 to 8,000
Fuels & oils	7,879	8,570	7,888	7,503	7,143	6,584	4,790	4,442	4,600	4,000 to 6,000
Electricity	1,526	1,747	2,041	2,146	2,166	2,150	1,942	2,393	2,500	2,000 to 3,000
Pesticides	3,539	4,201	4,282	4,154	4,767	4,994	4,485	4,588	4,600	5,000 to 6,000
Manufactured inputs	22,435	23,927	22,229	20,870	21,505	20,987	17,004	16,815	17,600	18,000 to 22,000
Short-term interest	8,717	10,722	11,349	10,615	10,396	8,821	7,795	7,305	7,800	7,000 to 9,000
Real estate interest 1/	7,544	9,142	10,481	10,815	10,733	9,878	9,131	8,202	8,300	7,000 to 9,000
Total interest charges	16,261	19,864	21,830	21,430	21,129	18,699	16,926	15,508	16,000	15,000 to 17,000
Repair & maintenance 1/ 2/	7,075	7,021	6,428	6,529	6,416	6,370	6,426	6,546	7,000	7,000 to 8,000
Contract & hired labor	9,293	8,931	10,075	9,725	9,729	9,799	9,879	10,747	11,400	11,000 to 13,000
Machine hire & custom work	1,823	1,984	2,025	1,896	2,170	2,184	1,810	1,956	2,100	2,000 to 3,000
Marketing, storage, & transportation	3,070	3,523	4,301	3,904	4,012	4,127	3,652	3,823	3,700	4,000 to 5,000
Misc. operating expenses 1/	6,881	6,909	7,262	9,089	9,106	8,232	7,993	8,311	7,600	6,000 to 8,000
Other operating expenses	28,142	28,368	30,089	31,143	31,433	30,712	29,760	31,383	33,200	32,000 to 36,000
Capital consumption 1/	21,474	23,573	24,287	23,873	23,105	20,847	18,916	17,348	16,800	17,000 to 18,000
Taxes 1/	3,891	4,246	4,036	4,469	4,059	4,231	4,125	4,345	4,400	4,000 to 5,000
Net rent to nonoperator landlord	6,075	6,184	6,059	5,060	8,640	8,158	6,698	6,987	7,800	7,000 to 8,000
Other overhead expenses	31,440	34,003	34,381	33,402	35,805	33,236	29,739	28,680	29,100	28,000 to 31,000
Total production expenses	133,139	139,444	139,980	140,377	142,669	133,957	122,335	123,502	132,800	136,000 to 140,000

1/ Includes operator dwellings. 2/ Beginning in 1982, miscellaneous operating expenses include other livestock purchases & dairy assessments. Totals may not add because of rounding. F = forecast.

Information contacts: Chris McGath (202) 786-1804, Andy Bernat (202) 786-1808.

Table 37.—CCC Net Outlays by Commodity & Function

	Fiscal year										
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989 E	1990 E
	$ million										
COMMODITY/PROGRAM											
Feed grains	1,286	-533	5,397	6,815	-758	5,211	12,211	13,967	9,053	3,042	5,562
Wheat	879	1,543	2,238	3,419	2,536	4,691	3,440	2,836	678	279	1,052
Rice	-76	24	164	664	333	990	947	906	128	999	959
Upland cotton	64	336	1,190	1,363	244	1,553	2,142	1,786	666	2,538	994
Tobacco	-88	-51	103	880	346	455	253	-346	-453	-569	-280
Dairy	1,011	1,894	2,182	2,528	1,502	2,085	2,337	1,166	1,295	662	893
Soybeans	116	87	169	288	-585	711	1,597	-476	-1,676	-32	116
Peanuts	28	28	12	-6	1	12	32	8	7	5	4
Sugar	-405	-121	-5	49	10	184	214	-65	-246	0	0
Honey	9	8	27	48	90	81	89	73	100	60	55
Wool	35	42	54	94	132	109	123	152	1/ 5	89	98
Operating expense	157	159	294	328	362	346	457	535	614	583	635
Interest expenditure	518	220	-13	3,525	1,064	1,435	1,411	1,219	395	283	284
Export programs	-669	-940	65	398	743	134	102	276	200	116	107
Other	-113	1,340	-225	-1,542	1,295	-314	486	371	1,695	5,788	1,100
Total	2,752	4,036	11,652	18,851	7,315	17,683	25,841	22,408	12,461	13,843	11,579
FUNCTION											
Price-support loans (net)	-66	174	7,015	8,438	-27	6,272	13,628	12,199	4,579	-153	1,011
Direct payments											
Deficiency	79	0	1,185	2,780	612	6,302	6,166	4,833	3,971	5,889	7,006
Diversion	56	0	0	705	1,504	1,525	64	382	8	0	0
Dairy termination	0	0	0	0	0	0	489	587	260	200	189
Other	25	0	0	0	0	0	27	60	0	83	0
Disaster	258	1,030	306	115	1	0	0	0	6	0	0
Total direct payments	418	1,030	1,491	3,600	2,117	7,827	6,746	5,862	4,245	6,172	7,195
1988 crop disaster	0	0	0	0	0	0	0	0	0	3,613	0
Emergency livestock/ forage assistance	23	329	16	0	0	0	0	0	31	902	8
Purchases (net)	1,681	1,602	2,031	2,540	1,470	1,331	1,670	-479	-1,131	-10	519
Producer storage payments	254	32	679	964	268	329	485	832	658	319	174
Processing, storage, & transportation	259	323	355	665	639	657	1,013	1,659	1,113	654	443
Operating expense	157	159	294	328	362	346	457	535	614	583	635
Interest expenditure	518	220	-13	3,525	1,064	1,435	1,411	1,219	395	283	284
Export programs	-669	-940	65	398	743	134	102	276	200	116	107
Other	177	1,107	-281	-1,607	679	-648	329	305	1,757	1,364	1,203
Total	2,752	4,036	11,652	18,851	7,315	17,683	25,841	22,408	12,461	13,843	11,579

1/ Fiscal year 1988 wool & mohair program outlays were $130,635,000 but include a one-time advance appropriation of $126,108,000, which was recorded as a wool program receipt by treasury. E = estimated in the fiscal 1990 President's Budget. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Information contact: Richard Pazdalski (202) 447-5148.

Food Expenditures

Table 38.—Food Expenditure Estimates

(See the July 1989 issue.)

Information contact: Alden Manchester (202) 786-1880.

Transportation

Table 39.—Rail Rates; Grain & Fruit/Vegetable Shipments

	Annual			1988		1989				
	1986	1987	1988	May	Dec	Jan	Feb	Mar	Apr	May
Rail freight rate index 1/ (Dec. 1984=100)										
All products	100.7	100.1	104.8	105.2	105.4	105.8	105.9 P	105.9 P	106.1 P	106.1 P
Farm products	99.6	99.3	105.6	104.4	108.0	108.9	109.4 P	109.0 P	109.0 P	108.6 P
Grain	98.9	98.7	105.4	104.1	108.2	109.2	109.7 P	109.2 P	109.2 P	108.8 P
Food products	99.9	98.6	103.2	103.9	103.6	103.8	103.1 P	103.2 P	103.1 P	103.3 P
Grain shipments										
Rail carloadings (1,000 cars) 2/	24.4	29.0	30.6	30.8	27.4 P	30.2 P	30.0 P	31.8 P	30.1 P	25.9 P
Fresh fruit & vegetable shipments										
Piggy back (1,000 cwt) 3/ 4/	629	588	532	765	419	374	419	455	502	763
Rail (1,000 cwt) 3/ 4/	563	660	606	718	711	701	583	686	571	683
Truck (1,000 cwt) 3/ 4/	9,031	9,137	9,534	11,569	9,341	8,896	8,650	9,391	10,293	11,301
Cost of operating trucks hauling produce 5/										
Owner operator (cts./mile)	113.1	116.3	118.7	118.5	120.4	121.3	122.1	122.9	124.1	123.5
Fleet operation (cts./mile)	113.6	116.5	118.4	118.3	120.1	121.0	121.4	121.9	123.1	122.6

1/ Department of Labor, Bureau of Labor Statistics. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1988 & 1989. 5/ Office of Transportation, USDA. P = preliminary.

Information contact: T.Q. Hutchinson (202) 786-1840.

Indicators of Farm Productivity

Table 40.—Indexes of Farm Production Input Use & Productivity[1]

(See the March 1989 issue.)

Information contact: Jim Hauver (202) 786-1459.

Food Supply and Use

Table 41.—Per Capita Consumption of Major Food Commodities

(See the March 1989 issue.)

Information contact: Judy Putnam (202) 786-1870.

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